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For the Experimenter
Radio Enthusiast

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AMATEUR RADIO

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EDITORIAL

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As you read this editorial the 21st Annual Federal Convention of the Institute, held over the Easter holidays, has come to an end and with it the completion of a year's work by the Federal Council on your behalf.

During the year much has been done to better Amateur Radio as a whole, a condition for which Federal Council is always working and striving while you continue to enjoy your hobby.

Little can be achieved, however, without the co-operation of the Divisional officers and members, and the fact that your support has been given is self evident in many respects, though, like any other organisation, there unfortunately are members who are prepared to sit by and let others do the work whilst they contribute little.

Today, as is only too evident, some commercial and foreign interests are using our bands without let or hinderence, and this constitutes an encroachment which will gradually engulf us if we are not united in strength, and capable of developing a policy to effectively combat this interference.

To be united in strength indicates we must ALL do our share in increasing the power of tenure which we hold over our frequency bands by International agreement — an agreement brought about by the very fact that the Amateurs pioneered the shortwave bands which today give to the world its rapid communication facilities, and by right of such work they were awarded a "voice" at International Conferences to preserve their hard won ground.

For two decades or more they have preserved these privileges against what could have been overwhelming forces, had they not united to combat the influences that would take away their rights.

Within our own Institute—and indeed in all other kindred societies throughout the world—the Amateur must unite to preserve his identity. In Australia we are in the fortunate position of having a Government Department that appreciates the value of the Amateur in the general field of electronics, particularly in times of war and peace, and in many other allied technical communal facilities. As a body we are recognised, and should so continue to be recognised, to obviate any possibility of losing our identity, and thereby perhaps, our rights. Therefore, we must unite and expand at the same time.

United in policy means we must ALL work for the same thing—our very much prized and privileged hobby. Our policy must be to expand; and to do this we must have membership, for with expanded membership we can have a greater influence to protect our interests. If we cannot speak as a body we will not be heard, therefore we must all encourage new members. We must constantly drive home to the Amateur who is not a member that his voice will not be heard, that irrespective of personal prejudices and feelings regarding what the Institute can give him he **should** be a member. The future is precarious and one powerful "voice" is going to do a lot more than hundreds of wandering echoes.

If you think we are fooling or talking idly then take time off to listen on the bands, and note the trends of international events!

If you want your hobby to continue strongly, we recommend you to be guided by what we say. Your Federal Council for the next year is going to work hard and strive for you again. Do all you can to encourage them and so make their work effective.

—FEDERAL EXECUTIVE.

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EMERGENCY-PORTABLE RIG

Fifteen Watt 80 Metre Transmitter Designed For Emergency, Portable Or Mobile Use

Several features of any portable or emergency rig are almost mandatory. These are small size and low over-all drain. Other no less desirable features are a self-contained variable frequency oscillator and a final tube capable of as high an output power as is consistent with the primary power source.

It is also desirable that the transmitter be simple and use as few parts as possible, so that servicing is easy and the parts replacement problem simple.

Insofar as possible, all of the above points have been considered in the design of the Emergency-Portable Rig.

Following on the Modulator and Antenna System described in the last issue, we now publish, from "Ham News," March-April, 1950, the RF portion to complete the emergency-portable station.

This 15 watt rig of three tubes —one a voltage regulator—has a self contained v.f.o., is compact and light in weight. The Modulator, mentioned above, together with the E-P Rig can be powered by a 100 Ma. vibrator power supply.

ELECTRICAL DETAILS

Refer to the circuit diagram, Fig. 2. The transmitter consists of a 6AK6 v.f.o. and a 2E26 final. A voltage regulator tube is also included.

The oscillator operates on the 160 metre band. Some measure of isolation is achieved by doing this, and ample power output is obtained to drive the final, even though the oscillator is doubling.

The 6AK6 tube was chosen for the oscillator because of several desirable features. This tube has a separate suppressor which may be connected directly to ground. If the suppressor grid were connected internally to the cathode, as is true with most miniature pentodes, extra coupling between the grid and plate circuits would exist which would materially affect the grid-plate isolation. This coupling is easily avoided by using a tube with a separate suppressor grid.

Further, the 6AK6 is a well-shielded tube and will handle a fair amount of power—at least sufficient power output is obtainable to drive most low-power pentodes or beam-power tubes.

The choice of the tube for the final stage was a little more difficult to make. Many things had to be considered, such as cost, size, availability and performance. Perhaps the one thing that decided in favor of the 2E26 was the ease with which this tube can be made to operate properly.

Compared to receiving tubes, such as the 6V6, the 2E26 has a low grid to plate capacity. This means that the circuit need not be tricky in order to avoid undesirable touchiness. From this standpoint the 2E26 is well worth the small extra cost involved.

The plate circuit of the final may seem unduly cluttered until you realise that an antenna matching network has been included in the design. This is the usual sort of pi coupling arrangement which in this case has been designed for fifty ohm output.

Use of a coupler of this sort tends to eliminate spurious radiations and brings to a minimum the possibility of producing interference.

The pi network shown is not tunable in the normal sense of the word. Coil L3 is actually the plate tank coil for the 2E26 stage. Tuning procedure will be explained later. As shown the output matches directly to 52 ohm co-axial cable which in turn must be matched to the antenna.

Other types of coupling, such as link coupling, could be employed. For example, to use link coupling, merely eliminate C11 and R3 and connect the right-hand end of coil L3 to ground. The link is then placed around the ground end of the plate coil L3.

VOLTAGE REGULATION

A great deal of care was taken, design-wise, to ensure that the oscillator would give a clean keyed signal. There is no excuse for a chirpy signal, even from a rig designed primarily for emergency use. This dictated the use of a voltage regulator tube which provides 150 volts to the oscillator and the screen of the final. The additional current drain is still within our prescribed limits.

SLUG TUNING

Iron slug tuning coils are a perfect solution for interstage and final tuning elements in the E-P Rig. At the power levels encountered there is no loss problem and the tuning range achievable is more than adequate.

Variable condensers might allow slightly higher Q circuits to be obtained. However, the slight betterment of performance which might be obtained in this manner would not justify the extra cost and the extra space which would have to be made available.

In a transmitter of this sort rapid frequency changing from one end of the band to the other is not necessary, although it is possible, using slug tuning, to move a hundred kilocycles or so without retuning the coils.

For large changes in frequency it will be necessary to adjust L2 and L3 to resonance.

E.C.O. VERSUS "CLAPP"

The excellence and popularity of the "Clapp" oscillator circuit might lead some people to ask why it was not employed in the Emergency-Portable Rig. This circuit was seriously considered, but several reasons caused it to be discarded in favor of the e.c.o. circuit.

In order to take full advantage of the "Clapp" oscillator circuit it is necessary to use a high Q, high inductance coil in the grid circuit. For operation on 160 metres this sort of coil becomes unwieldly and large. To do the job properly would require a coil approximately two inches in diameter and two inches long—that is, a so-called fifty watt coil. This is obviously impractical in a four by five by six inch cabinet.

Other considerations make the e.c.o. circuit ultimately practical. It is relatively tolerant of changes of the circuit components. It is a simple circuit with which most Amateurs are familiar—no slight consideration if true emergency work has to be done.

These and other factors led to the choice of the electron-coupled circuit for use as the v.f.o.

CONSTRUCTIONAL DETAILS

The entire transmitter is housed in a four by five by six inch utility box. One of the removable sides serves as the front panel. It will be necessary to bend a chassis out of one-sixteenth inch aluminium or sheet metal. The top of the chassis measures 5⅛ inches by 3 inches. One flange is bent down 1¼ inches and the other is bent down one-half inch.

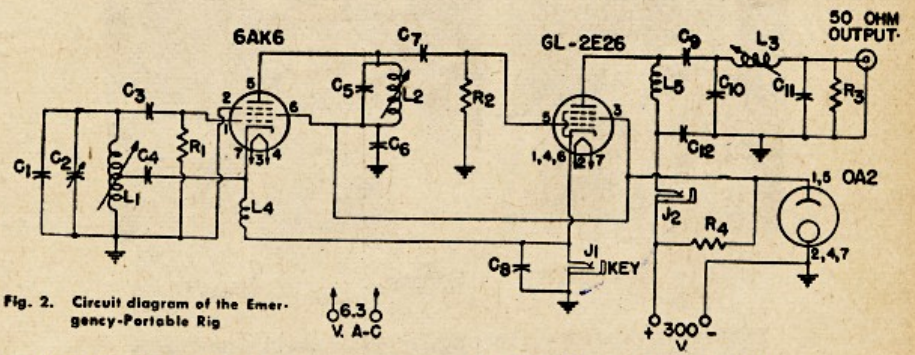

Fig. 2. Circuit diagram of the Emergency-Portable Rig

C1—400 pF. silver mica.
C2—100 pF. variable.
C3, C5, C10—100 pF. silver mica.
C4, C6, C12—0.002 uF. 500 volt.
C7, C11—100 pF. mica.
C8—0.005 uF. 500 volt.
C9—0.001 uF. mica.

J1, J2—Closed circuit jack.
L1, L2, L3—38 turns No. 26 enamel wire on ½ inch diameter coil former.
L4, L5—2.5 millihenry r.f. choke.
R1—0.1 meg., ½ watt.
R2—20,000 ohm, ½ watt.
R3—5,000 ohm, ½ watt.
R4—5,000 ohm, 5 watt.

The one-half inch flange mounts against the front panel at a height which allows the rear flange to extend down so that it is in line with the bottom edge of the front panel.

The dial mounts on the upper left portion of the front panel. The co-axial connector for the 50 ohm output is at the upper right and the two jacks are mounted at the bottom, one at the left and the other at the right. A rubber grommet is placed in the lower right-hand corner of the front panel. The two filament leads and the two 300 volt leads are cabled and run through this grommet.

Fig. 3 gives the details of parts mounting. Note that coils L1 and L2 are mounted under the chassis and coil L3 is mounted at the back of the 2E26 on top of the chassis. Components mounted above chassis, aside from the tubes, are C2, L3, L5, C9, C10, C11 and R3.

As is evident it will be necessary to remove part of the flange on the box in order to clear parts mounted on the chassis. It is also necessary to drill two holes in the other removable side for tuning L1 and L2 and a hole must be drilled in the bottom of the box so that L3 may be tuned.

One particular point of interest in the wiring can be seen clearly in Fig. 3. Co-axial cable (small size) is used to make the connection between the top of coil L1 and the stator of C2. The co-ax is grounded at the point where it comes through the chassis. The inner conductor connects to the stator of C2.

If ordinary, unshielded wire were used for this connection, mechanical shock would cause the wire to move and the result would be a minor variation in the stator to ground capacity of C2. Using co-ax permits thorough shielding and gives a minimum frequency change due to the connection being moved.

Component part placement is not critical. As a matter of fact, the mechanical layout shown in the photograph could probably be improved if the 6AK6 and the OA2 were interchanged in position, so that the 6AK6 was between the 2E26 and the OA2.

CRITICAL COMPONENTS

For best operation of the circuit, C1, C2, C5, C7, C10 and C11 should be as close as possible to the specified value. Silvered-mica condensers are recommended for C1, C3, C5, C10 and C11. The remainder of the condensers are used for blocking or by-passing purposes and are not critical although the values specified should be used if possible. The ceramic high-capacity condensers will save space if employed as C4, C6, C8, C9 and C12.

The thirty-eight turns of wire specified for coils L1, L2 and L3 should just fill the coil form with a one-layer winding. No pruning of coils should be necessary if the layout shown is followed.

Resistor R4 should be of a value which will not allow more than 30 Ma. through the OA2 or VR/150 tube when the keying jack is open.

V.F.O. COVERAGE

Any small 100 pF. condenser should serve for the oscillator grid tuning condenser. If the oscillator frequency is set at 3.5 megacycles with C2 at maximum capacity, the frequency will be 3910 kilocycles when C2 is tuned to minimum capacity.

This slightly restricted tuning range can be used to advantage, however. If the bottom end of the range is set at approximately 3500 kilocycles, then the top of the range wil be just outside the high frequency end of the band. In this way you will be fairly certain to stay inside the band under all conditions. Remember, there may be no frequency standard available in an emergency.

TUNE-UP ADJUSTMENTS

Remove the E-P Rig from its case and remove the 2E26 tube. Apply filament and plate voltage. Adjust L1 until the 6AK6 is oscillating at the proper frequency. Tune L2 to resonance by a pick-up loop and a flashlight bulb, or a neon bulb. A meter plugged into the keying jack should read a current of approximately fifteen mils.

Replace the 2E26 in its socket. Short the 50 ohm output connector. (This effectively causes the final to be completely unloaded.) Apply plate voltage and tune L3 to resonance by noting the dip in plate current.

The rig should now be tuned to the frequency of the e.c.o. Open the keying jack and measure the current flowing through the OA2. This should not exceed 30 mils. Adjust R4 if it does. Close the key. The OA2 current should be five mils or greater. As a double check on this, make certain that the voltage on the 2E26 screen is 150 volts.

Remove the short from the 50 ohm output connector, place a matched 50 ohm feeder on the output jack, and you are on the air.

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CLEANING LITZ WIRE

It is important when using Litz wire, that none of the fine individual strands be broken when making a connection and that each strand be cleaned of enamel so that is may be soldered.

The quickest and easiest method to accomplish this is to heat the end of the wire red hot and then plunge the red hot end into an alcohol bath. This method is superior to using fine sandpaper as there is practically no risk of breaking wires and they are cleaned and ready for solder.—"QST" Jan., 1951.

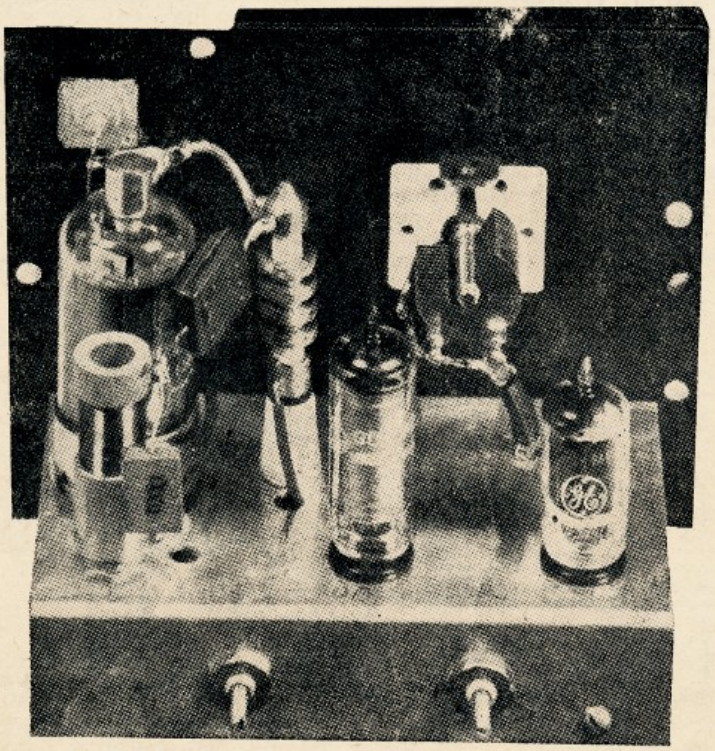


Fig. 3.—Rear view of the Emergency-Portable Rig. Note the two slug-tuned coils mounted on the rear apron. Coil L2 is on the left; coil L1 is on the right.

A.O.C.P. CLASS

The Victorian Division A.O.C.P. Class will commence on Thursday, 12th April, 1951. Morse and Regulations are held on Monday and Theory on Thursday evenings from 8 to 10 p.m. Persons desirous of being enrolled should communicate with the Secretary W.I.A., Victorian Division, 191 Queen Street, Melbourne (Phone FJ 6997 from 10 a.m. to 4 p.m.), or the Class Manager on either of the above evenings.

A Simple Modulation Monitor

BY C. A. CULLINAN,* VK7XW

Amateurs who visit the transmitting station of broadcasting station 7EX always express intense interest in the continuously operating modulation monitor.

This rather intricate instrument enables the station engineers to have available, all the time, a meter which reads the modulation percentage of the station, together with a warning lamp which will light up whenever any predetermined modulation percentage is reached.

In the United States all broadcasting stations must use a modulation monitor of this type and it has to meet very stringent specifications. Here in Australia, all the better stations use such monitors and a visit to one of them will amply repay any Ham who is interested in the matter of his modulation.

The meter normally used consists of a linear diode driving a vacuum tube voltmeter having special characteristics to indicate peaks of modulation rapidly. Means are provided to enable both positive and negative peaks to be measured to determine the symetry of modulation of the transmitter.

The linear diode also feeds a thyratron tube which in turn controls a brilliant lamp. A control, calibrated in percent modulation, is provided to adjust the point of which the thyratron will fire so the lamp can be made to flash at any desired modulation percentage.

Such a modulation meter is a rather expensive item for the Ham to construct, whilst its calibration can prove a difficult job. However, with the recent release of stocks of British and A.W.A. crystal diodes in Australia the situation has rapidly changed where the Ham is concerned.

Now, with a handful of parts, he can easily construct a suitable modulation monitor at reasonable cost and little difficulty.

The circuit diagram shows that the meter consists of two crystal diodes, the first of which is used to rectify the carrier. The second diode is fed via a reversed 3-1 interstage audio frequency transformer and rectifies the audio envelope to provide current to operate the indicating meter. The condenser across the secondary of the transformer stores audio energy to enable the meter to read average modulation rather than peak.

● The switch enables the modulation monitor to read either positive or negative modulation as well as the reference carrier level on the one milliammeter.

For those millionaires who want to do the job the expensive way, a separate meter can be used for carrier reference as the broadcasters do it.

The meter should be one with a fast action, otherwise it will be too slow and permit a far greater modulation percentage in the transmitter than appears apparent. In this regard some experimenting with the condenser across the output of the audio frequency transformer may be in order.

* 12 Montrose Place, Launceston, Tas.

CALIBRATION

Calibration is frequently the bug-bear of most constructors of home-made test equipment, but in this case every endeavour has been made to simplify calibration as much as possible.

(a) Divide the meter scale into five equal parts, then sub-divide each of the first (left-hand) four major parts into five equal parts. A long line is drawn through the major divisions and marked as shown. Note that the 100% position is also marked "set carrier." Here at VK7XW a Triplett model 321 0-1 d.c. milliammeter was used with the major scale divisions at 0.2, 0.4, 0.6, 0.8, and 1.0 on the original meter scale. This meter has an internal resistance of 33 ohms and the purpose of resistor R2 is to enable the above scale to read correctly.

Actually any other 0-1 Ma. meter can be used if R2 is properly adjusted. R2 is a screwdriver adjusted potentiometer.

(b) With the switch in the "carrier" position, tune in your transmitter without modulation and adjust the coupling to the transmitter so that the milliammeter reads 100 ("set carrier"). This establishes a reference level which must always be used or the rest of the monitor will give incorrect results.

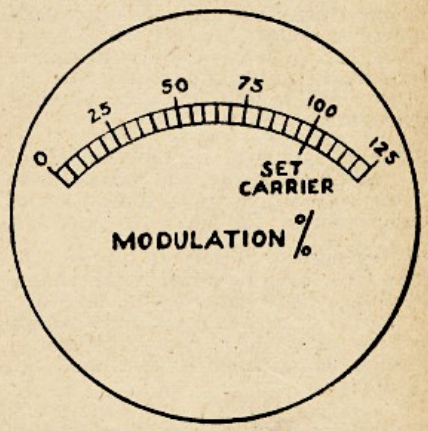
Next switch over to "positive" and apply tone to the transmitter. Use a scope to determine 100% modulation, then adjust R2 so that the milliammeter reads 100. Re-adjust the "set carrier" if necessary. The modulation monitor is now calibrated and will read correctly on all points provided the "set carrier" reference is always maintained.

It may be found that the carrier reference has changed when R2 is adjusted, in which case the transmitter coupling must be re-adjusted to give the correct carrier reference.

If the transmitter is reasonably linear and does not suffer from carrier shift, caused by poor power supply regulation, etc., it is possible to calibrate the meter without a scope.

To do this, set the "carrier" reference as before without modulation, then gradually apply a single tone. At the point of 100% modulation the milliammeter (in "carrier" position) will change. Now switch to positive modulation and see if the meter reads 100%. If not alter R2, also re-checking the carrier level until the meter kick corresponds with 100% modulation on the meter.

However, this method will not be exact if the meter in the "carrier" reference position changes for any reason than reaching 100% modulation of the transmitter.



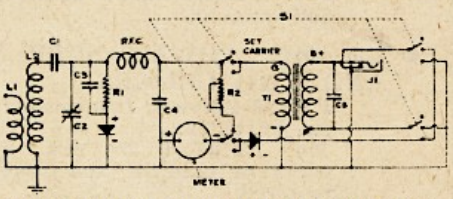
Meter Scale

The monitor should normally be used in the negative position.

If it is found that there is a discrepancy, after calibration is completed, between positive and negative, this will usually indicate a symmetrical modulation—a condition which should be corrected in the transmitter.

In use, in the Ham shack, care must be taken to learn to use the monitor correctly because the percentage of modulation, as read on speech, will be different to that obtained on tone. In general it can be assumed that a reading of 75% will be equivalent to an actual 100%. This is because of the dynamic characteristics of the meter movement will not permit instantaneous readings, and in any case if the meter could do this then the eye could not follow the pointer. It is for this latter reason that the F.C.C. in U.S.A. will not permit the use of cathode ray oscillographs for continuous modulation monitoring in broadcast stations.

Now that you have read this, if you haven't already seen one in action, take a trip to your nearest broadcast station and find out if they have a modulation monitor. If so, see it in action and you will soon want one like this, for yourself.



Note reversed connection of audio transformer, also headphone jack for audible monitoring. This cuts out the meter on percentage readings.

C1—0.001 uF. mica condenser.
C2—50 pF. variable condenser.
C3—10 pF. mica condenser.
C4—0.0003 uF. mica condenser.
C5—0.02 uF. 200 volt paper condenser.
J1—Single circuit closed jack.
M—0-1 Ma. d.c. milliammeter.
R1—1000 ohms ½ watt carbon resistor.
R2—15000 ohm w.w. potentiometer.
RFC—2.5 mhy. r.f. choke.
Rectifiers—each 1N34 or GEX44 crystal diodes.
S1—4 pole 3 position wafer switch.
T1—3-1 audio frequency transformer.

Coil Data:

	L1	L2	
80 metre	6 t.	35 turns	22 B/S enamel.
40 „	4 t.	15 „	20 „ „
20 „	3 t.	7 „	16 „ „
10 „	2 t.	4 „	16 „ „

All coils wound on 1½" formers with L1 at ground end of L2. Also, all coils are close wound except the 10 metre which is spaced to one inch.

Metering Transmitters

Here is a tip applicable to those 0-1.5 ampere (American made) RF Meters, where use for RF purposes is not required. Some quantity of these has been available from disposals.

A reasonably small diameter meter case (2-3/16") and a robust movement with adequate damping, makes it worthwhile converting for measurement of DC in transmitters. The unit is basically a moving coil type with an internal thermocouple. The full scale deflection of the movement varies somewhat from meter to meter, being about 12 to 15 Ma.

The meter is gently withdrawn from the case, then the scale plate is unscrewed and put aside. This gives access to the thermocouple which is removed, without disconnecting the two insulated leads. These leads are then bared back a little and soldered one to each terminal plate, thus connecting the moving coil to the terminals.

The original calibrations and any unrequired printing are carefully removed from the scale plate using a razor blade and rubber. With care, the white background will not be unduly damaged. Any suitable calibration may now be applied with Indian ink and drawing instruments.

After re-assembly, an external shunt (or shunts) is made and adjusted to suit the calibration, using some type of standard meter for checking purposes.

As examples, three of these RF meters have been modified for the home transmitter: 0-20 Ma., 0-300 Ma., and the third as a switched multi-range unit for the low power stages.—VK3ABA, 60 Shannon St., Box Hill Nth., E.12, Victoria.

SUBSCRIPTIONS

● **Please pay your Subscriptions PROMPTLY when due. Failure to do so may result in the loss of valuable issues of "Amateur Radio." High costs of production make it necessary to limit the number of extra copies printed each month.**

PCJ, HOLLAND, CHANGES PROGRAMME SCHEDULE

We have received from Philips Electrical Industries of Australia Pty. Ltd. notification of a change in the programme schedules of Station PCJ, Holland, for the East and the Pacific Area as from 1st March.

Special Pacific Area programmes from this station are now being transmitted on Sundays only (instead of Sunday, Wednesday and Tuesday as previously) from 10.30-12.00 GMT, on 13, 16, 19 and 49 metres.

ABSTRACTS FROM OVERSEAS MAGAZINES

R.S.G.B. "BULLETIN," SEPTEMBER, 1950

Page 86: **"Panoramic Reception, Part I., Fundamentals."**—Excellent introduction to this subject by G2FJD. The author traces the history, application and fundamental considerations of the system.

Page 94: **"Etching of Quartz Crystals."**—Contains full details of an alternative frequency-shifting system which is comparatively little known and which possesses many important advantages.

R.S.G.B. "BULLETIN," OCTOBER, 1950

Page 126: **"Panoramic Reception, Part II."**—Continuation from Sept. issue. A circuit of a Panoramic Converter for the 144-146 Mc. band being fully described and circuit diagrams discussed.

Page 130: **"Further Notes on T.V.I."**—Transmitter design; interferences from fundamental radiation and causes of same discussed.

Page 135: **"Beam Tetrodes used as R.F. Amplifiers."**—Covers neutralisation of beam tetrodes and the use of the cathode follower.

R.S.G.B. "BULLETIN," NOVEMBER, 1950

Page 160: **"Filters for Speech Clipping."**—Practical explanation of how to design and build suitable efficient low-pass filters, as well as full information on the results which may be expected.

Page 166: **"All-Band Grip Dip Oscillator."**—Constructional article. Full details, circuit diagrams and photographs.

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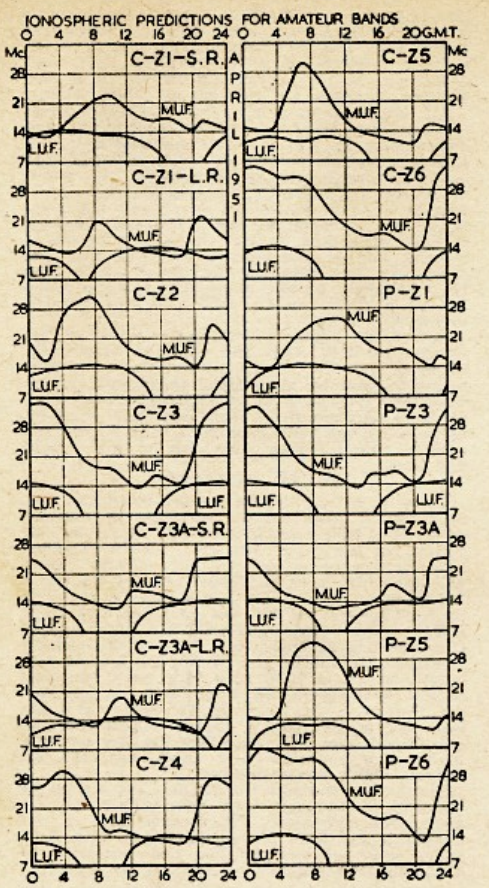
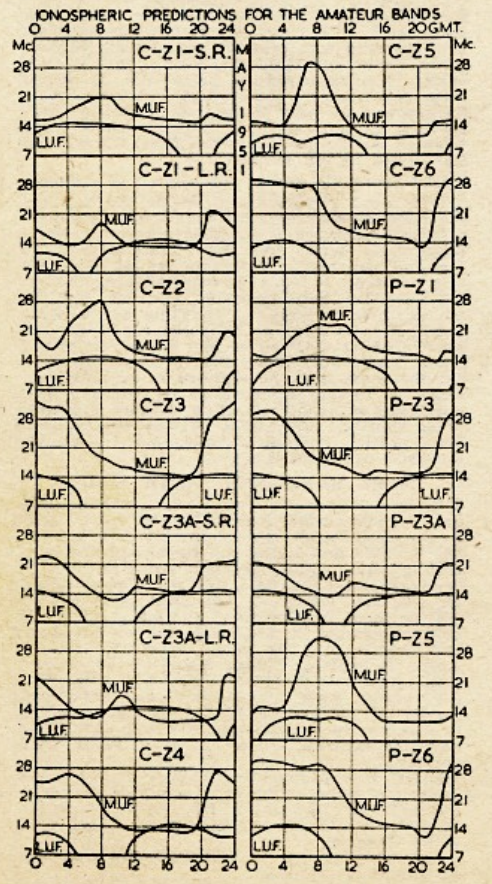
DOUBLE CHANGE SUPERHETS

If considering a crystal controlled oscillator for the second mixer, I suggest 2333.3 Kc., with the i.f. frequencies 1868.3 Kc. and 455 Kc. Multiples of the third harmonic of this crystal will give band edge markers at 7, 14, 28 Mc. Commercial 1900 Kc. i.f. transformers will tune to 1868 Kc. with ease—VK6EC.





IONOSPHERIC PREDICTIONS FOR THE AMATEUR BANDS

APRIL, 1951

The accompanying charts have been prepared by the Ionospheric Prediction Service of the Commonwealth Observatory. The first set of the series was published in the November, 1948, issue of this magazine, together with an article explaining the nature of the forecasts and how to use them. Nine of the charts, prefixed by the letter "C" for Canberra, refer to forecasts for the South-Eastern Australian States. The remainder, prefixed by the letter "P" for Perth, are for Western Australia.

The Canberra charts refer to the following world zones:—

Zone	Region	Terminal
1.	Western Europe	London
2.	Mediterranean	Cairo
3.	N.-West America	San Francisco
3a.	N.-East America	New York
4.	Central America	Barbados
5.	South Africa	Capetown
6.	Far East	Manila

The forecasts have actually been prepared for point-to-point circuits between Canberra and the overseas terminals mentioned in the above table. It is, however, to be expected that the charts will provide an approximate indication of ionospheric conditions for all Amateur contacts from South Eastern Australia to the various world zones.

The Perth charts are similar to those based on Canberra. No forecasts are given from Perth to Zones Z2 and Z4 for the current months, as chart P-Z2 would be essentially similar to chart P-Z1, while chart P-Z4 might be unreliable due to auroral activity in high northern latitudes.

USE OF CHARTS

All that is necessary in using the charts is to select a time (G.M.T.) during which a specified Amateur band frequency is below the maximum usable frequency (m.u.f.) of the F region of the ionosphere but above the lowest useful frequency (l.u.f.) for the desired contact. In two cases, Zones 1 and 3a, it is necessary to consult both the short-route (S.R.) chart and the following long-route (L.R.) chart.

QUIZ

The Prediction Service welcomes comments on the accuracy of its predictions. In particular, answers to the following questions on the Canberra-San Francisco circuit would be useful:

1. Were good conditions experienced on 7 Mc. for the period 0600 to 1500 hours G.M.T.?
2. Was the 14 Mc. band workable between 1200 and 1800 hours G.M.T.?
3. Was the 28 Mc. band workable for several hours around midnight G.M.T.?

Answers to the Quiz should be sent to the W.I.A. and should, if possible, refer to consistent results obtained on the majority of days in the mouth.

ALTERATIONS AND DELETIONS TO AMATEUR CALL SIGNS

December, 1950, and January, 1951

VKs— ALTERATIONS

New South Wales

2CJ—6th Ave., Sawtell.
2EL—c/o. Mr. A. I. K. Clarke, 76 Fricourt Ave., Earlwood.
2FX—68 Carrington St., Mayfield East.
2FZ—35 Wentworth St., Lakemba.
2IZ—64-65 Hume Highway, Yagoona.
2JQ—The Rectory, Junee.
2MJ—16 Albert St., Leichhardt.
2QW—Lot 210 Bowden Boulevarde, Yagoona.
2VM—3 Abbott Rd., Artarmon.
2WI—26 Wilson St., Maroubra.
2AAR—c/o. Depart. of Civil Aviation, Coffs Harbour (Gvt. Aerodrome).
2AAS—17 Brook St., Muswellbrook.
2ACO—2 Walton Cres., Abbotsford.
2AEY—115 Commerce St., Taree.
2AOB—Sherlock Ave., Panania.
2ATP—13 Havilah St., Chatswood.
2RZ—21 Alleyne Ave., North Narrabeen.

Victoria

3CO—50 Garden Vale Rd., South Caulfield.
3DS—106 Cardigan St., Ballarat.
3NC—Flagstaff Hill, Casterton.
3NG—15 Como Ave., South Yarra.
3NW—4 Kenilworth Gr., Glen Iris.
3PB—7 James St., Box Hill.
3PL—236 Bluff Rd., Sandringham.
3QK—Churchill Island, Newhaven.
3SD—4 Wyuna St., West Brunswick.
3SM—28 Reynolds Pde., Pascoe Vale South.
3UJ—Lilydale Rd., Ringwood East.
3US—15 Hassett St., Leongatha.
3VL—15 Hassett St., Leongatha.
3YE—115A Bambra Rd., Caulfield.
3AJO—108 Nixon St., Shepparton.
3AKA—42 George St., Oakleigh.
3ANM—15 White St., Coburg.
3ANW—4 Kenilworth Gr., Glen Iris.
3AOK—397 Dandenong Rd., Malvern.
3ASC—59 Begonia Rd., Gardenvale, S.4.
3AWN—34 Park St., Parkville.

Queensland

4EF—15 Griffen St., Mackay.
4EL—Radio Station, Clevedon, via Townsville.
4ES—49 Gerler St., Rainworth.
4GE—Flemington St., Kendra.
4KO—99 Brisbane Rd., Booval.
4PO—Old Cleveland Rd., Belmont.
4XG—McCormack Ave., Oakleigh.

South Australia

5FD—Amor St., Mount Gambier.
5FL—15 Denning St., Hawthorn.
5KL—29 Turnbull Rd., Enfield Heights.
5LK—147 Napier Ter., Westbourne Park.
5LX—147 Napier Ter., Westbourne Park.
5NB—328 Brighton Rd., Hove.

Western Australia

6VM—22 Cross St., Swanbourne.

Tasmania

7JT—33 Ashwater Cres., Penguin.

VKs— DELETIONS

New South Wales

2IA—Cancelled.
2AJS—Cancelled.

Victoria

3RF—Cancelled.
3WL—Cancelled.
3XE—Cancelled. Operating under VK6XE approx. 2 years; VK3XE reserved for return as requested.
3AFQ—Cancelled, now operating under VK5ED.
3AGM—Cancelled.

Queensland

4HC—Cancelled.
4KJ—Cancelled.
4KV—Cancelled, now operating under VK3AVC.
4LB—Cancelled.
4MR—Cancelled, now operating under VK2MR.
4MU—Cancelled.
4RI—Cancelled, now operating under VK3ARI.

FIFTY MEGACYCLES AND ABOVE

Compiled by J. K. RIDGWAY, VK3CR.

These brief notes are indicative of the restricted activity on the v.h.f. bands, particularly 50 Mc. now that the DX season has passed. We can only assume that the lack of activity is brought about by intensive overhaul and rebuilding programmes by the 50 Mc. devotees.

Friends of VK3ACL will be very sorry to learn of his sudden illness. Eric was admitted to the Mornington Hospital about a month ago after a heart attack, but is now convalescing at home and is reported to be coming along nicely. We sincerely hope that it will not be long before Eric's cheery voice is heard once more on 50 Mc.

50 Mc. ACTIVITY

NEW SOUTH WALES

With the passing of the DX this band has become very quiet. It seems to be the time for pulling down beams and scraping off the barnacles. 2XX found his folded dipole driven element had open-circuited and 2AH was surprised at the amount of oxidation which can occur in three years or so.

2ANU, of Muswellbrook, has been able to go QRO to 8-9 watts now that he has a 32v. house-lighting plant and has been worked in Sydney. 2AET has a three element beam which can be rotated by leaning out the window. Rix's signal has come up more than somewhat. 2JH, of Croydon, came onto the band with c.w., but was soon modulating the 35T final. 2LG is still using the 28 Mc. beam on this band. 2QZ has his folded dipole on a stick and swings it out over the street; there has been an increase in the signal reports in and out. 2MQ is building a new modulator. He has had trouble with impure polystyrene in the final's neutralising condensers.

2ARH at last has a beam functioning, though is inclined to work off the back of it. 2AH back from holidays, works this band with a dipole at the moment. 2YR has been grinding 900 Kc. crystals down to 1002 Kc. or so. 2JU has 50 ft. masts up and will be putting up an array directed towards Canberra. 2ABC was heard working 2GU with good signals at both ends.

144 Mc. DOINGS OF THE MONTH

NEW SOUTH WALES

Two new signals on the band are from 2ATL and 2ACO. 2YR has struck b.c.i. trouble and can't work this band in the evening with the beam pointed north. 2NP is replacing the super regen. Rx with a double conversion superhet built on the 522 Rx chassis. 2QZ is doing much the same and has almost finished 2 metre Tx with 6V6, 6V6, QE04/10 832A line up.

In a prominent position in 2AH's shack is a card from ZL1ADX who heard his 144 Mc. signal last month. Alan's converter with p.p. pentode r.f. stage, p.p. mixer and p.p. oscillator is certainly a fitting input for the 32 element beam. 2XV likes the 12AT7 as mixer-oscillator and is going to try another one as a cascode amplifier. 2ANF has a cascode going and is very well pleased with it. John is sharpening his pencils to take over these notes in April.

2ABC, back from a holiday in VK5 and VK3, has been busy teeing up a pack of VK2 144 Mc. stations for an attempt to make Interstate contacts in the small hours in mid-March.

VICTORIAN V.H.F. GROUP NOTES

Please note the Group meeting night—the third Wednesday every month and, if interested in v.h.f. work, do your best to attend. At the February meeting, 16 members including visitors 7RL and Magazine Technical Editor (3VZ) spent a very interesting and informative night. There were no field day reports due to the washout on 18th February, but an interesting discussion took place concerning articles for publication in "Amateur Radio." Many group members felt that publication of technical articles on how to build v.h.f. equipment using tubes and parts readily obtainable in Australia would go a long way towards encouraging more activity on the v.h.f. bands.

The slogan, "Populate or Perish," can well be applied to these bands. For his part, the Technical Editor explained that he was only too willing to receive such articles and that he would publish same. There is a wide field to be covered: different types of transmitters, different types of receivers and converters, modulation, a.m. and f.m., frequency measuring and test equipment, antennae, etc., etc. Many group members are doing what they can along these lines and it is hoped that v.h.f. men in other States will also contribute such articles.

Two samples of equipment that could well form the subject of an excellent article were displayed by 3XA. They were the exciter units for his 50 Mc. and 144 Mc. transmitter using 6J6s and 832s. There are many TR1143As about and many modifications must have been made by various Hams, so that a number of articles on modifications to this rig, published in much the same manner as were the Type 3 Mark 2 modifications, would be of great value to many who are as yet uncertain as to the best way to make such modifications, due to a general dearth of information about this rig. It was also suggested that reprints of articles from overseas magazines was another way in which the lack of supply of articles may be overcome. Many members read many different magazines, so if you think that a particular article would look well in our magazine, shoot it along, you might be the only one who has seen it.

The next field day will be on Sunday, 15th April, the contest commencing at 1200 hours and ending at 1700 hours. Stations who have notified that they will be portable are 3FO, Arthur's Seat; 3ABA/YS, Mt. Macedon; 3JO/OJ, Donna-Buang; 3ZL/GM, Mt. Buninyong; 3AKE/VF, Barrabool, while 3UI at Tatura and 3APF, 3AT, 3HZ all at Shepparton will be looking for contacts on 50 and 144 Mc. 3ZL and 3AKE will also have 288 and 576 Mc. gear and will be anxious for contacts on these bands.

Any other stations intending to operate portable on 15th April are asked to pass on such information so that it may be included in the 3WI broadcasts. It has also been suggested that any last-minute news of portable activity could be passed along on 7.1 Mc. at 0800 hours, 3AJI will be pleased to collect same and will pass it on for inclusion in the broadcast. Country stations are asked to pass on details of transmitting and/or listening times, not only for field days, but for any other times which may be convenient, so that their zone representative can send them on to 3WI after the Sunday broadcast.

Power blackouts in VK7 have thwarted the efforts of 7KB, 7AB and 3XA to keep daily skeds on 144 Mc., conditions also do not appear to have been so good since the break in the weather. 7PF is now in Melbourne and may be here permanently. Welcome, Peter, and let us hope we can soon hear your voice on the air.

Note.—Don't forget to send in your field day logs.

SOUTH AUSTRALIA

Activity mainly centred on 144 Mc. for the past month although activity has not waned on 50 Mc. Had a letter from 5BC with news of activity in the River districts ("Pansy" Parsons note what advertising will do!). 144 Mc. gang will concentrate on suggested tests by VK2 and VK3 during March. Early mornings is the best time to try for 144 Mc. DX as experience from D.C.A. frequencies around 120 Mc. have shown. One morning recently, 5 x 5 contacts between Adelaide, Melbourne and Nhill ground to ground continued up to 10.30 a.m. The early morning cannot be stressed too much and concentrated on. Best days are when the conversion is down low, this must create a duct in which the signals travel. The best times that the above occurs is between midnight and dawn onwards, all efforts should be made then.

Those who thought the 50 Mc. DX waned at the end of January must have missed out on some good openings. 5BC reports ZL2s on 1st February and 5JD QSOed ZL2BJ on 14th February who reported he had been listening to 5BC and 5MA ragchewing for the last hour.

5MD has his ground plane outdoors and signal is much healthier. Rumours of building crystal converter. 5JD's recent lecture on 144 Mc. at W.I.A. meeting should give fillup to v.h.f. activity. Practical demonstration was perfect ending to an interesting lecture. Well done Jack. 5BC since v.h.f. contest now has 80 watts to a 834 with zero bias 807 modulators. 5MA is using converted 1133 at present, but a new chassis has appeared so more will be heard from Fred later. Reports of a female voice background in your phone, words such as preserving, garden, washing, pulling fuses. Hard to catch but Fred answers Yes Dear. He worked 5GF when at Mt. Barker.

5KW using 815 and 40 watts input to a dipole.

5FM heard remarking on 50 Mc. he had had the band because of too much noise. It's marvellous how much is in some receivers. Noise limiters do help. 5AX been QSO 5KL on 50 Mc. and also testing with 5QR on 144 Mc. 5FY also resident in Gawler with 5AX works on 144 Mc. Has been heard in Adelaide, but Tx too unstable to copy on anything but a super regen. Ron is using a CV6 super regen. Rx and 6J6 Tx. 5RO QRP on 50 Mc. using 6J6 with 2 watts input. Just shows that because you can't get 100 watts that the enthusiasm needn't lack. 5RA—no further information re activity. 5RD not heard on of late. Waiting to move into new home shortly. 2AT, QTH Broken Hill, reports hearing 5BC. Possibly ground wave, but unable to QSO; using 832 final.

576 Mc. BAND—NEW SOUTH WALES

After a long period of inactivity there have been signals around Sydney on this band. 2HO is the latest convert and has at last worked 2ANF. 2WJ and 2ABH run skeds and are busy getting 2AJZ going. On 15th April there is to be a general v.h.f. field day with bonus points for 576 Mc. contacts. The final arrangements will be made and locations allotted at the v.h.f. section meeting at Science House on 6th April and details will be given over 2WI on 8th April. It looks as though there will be at least eight parties with 576 Mc. portable gear. The s.w. corner gang will be equipped with gear for 50, 144, 288 and 576 Mc. bands and are going to make a week-end jaunt to a high spot. Field day arrangements are in charge of 2ANF, 2WJ and 2YM.

2ANF is experimenting with a crystal diode mixer and hopes to build up a simple converter for the band. Several ASB7s are in circulation around the suburbs and it must be rather hard to let them go.

Acknowledgments to VKs 2QZ, 3JO and 5KL for the above material.

DX NOTES BY VK4QL

February produced even worse conditions than the previous month. 14 Mc. was practically useless up here, either for DX or Interstate working. DX usually very weak, if there at all, and Interstate stations would disappear while you listened to them. The only reasonable opening observed here was on 17th February, for a period from 0630-0800 G.M.T., when AR8AB, ZD4AB; 4X4RE, ZB1BE, DL1FK were worked. On the morning of 8th February round 2100 G.M.T. some good DX was heard but very weakly and not workable. They were VP5BL, KG4AO, ZD4AE, and CR5AF.

28 Mc. opened slightly for the first day of the W/VE Contest, west coast stations being workable for an hour or so, but they were very unstable.

7 Mc. has shown it can be as erratic as the others. One day in the early morning, the band would be OK for DX, the following possibly nothing there. On the 22nd and 27th, the band was full of Gs, and they were causing plenty of QRM on the band. It was only for a short time from 2030-2100 G.M.T. HP1TI mobile marine was worked one morning when he was 750 miles west of the Azores. VQ3CF has been putting a good consistent signal the latter part of the month.

The first day of the W/VE Contest (c.w.) produced fairly good conditions on 7 and 3.5 Mc., but the following night it was very poor. This was also noted by ZL1BY, who worked all W districts on the four bands. Quite a fair performance, with over 600 contacts.

Conditions for the first week-end of the B.E.R.U. Test were erratic and on the lower bands very noisy here. A peculiar effect was noticed on 7 Mc. around 0900 G.M.T., when only ZL and VK signals could be heard, but they were fuzzy and indistinct. Suddenly, it all cleared up and the VE stations and VP6CDI came through with good clean signals. 28 Mc. was practically useless, only one ZL, one VK3z and VS1 being worked. The VS1 called 2RA, but Ray did not hear him I found out later. 14 Mc. showed very erratic behaviour. VK and ZL signals being in and out throughout the day. I replied to a number of ZL CQs, but they did not hear me or anybody else.

On 28 Mc., during the first day of the W/VE Contest, at the same period of the day, the following prefixes were heard, VK2, VK3, VK4, VE, W, JA, KH6, KG6 and ZL. This gives some idea of the way that band was behaving.

I have received no news from the gang this month, so once again, the notes consist of my own observations. It's not very heartening to try and make these of general interest.

Although conditions have been poor and only a few new countries added to the list, 12 new confirmations were received, the pickings being: CR7AD, HR1DF, UC2KAB, ZM6AK, 4X4CR, PJ1UF, UB5KAA, ZK2AA, PZ1AL. Others which may interest somebody waiting to see a QSL from them, were: VR1C, FF8JC, KC6WC, VP9TT and YU3FLA. One disturbing angle on QSLs is the propaganda appearing on some of the OK QSLs these days. One feels like putting them in the w.p.b.

14 Mc. listings for the month are not plentiful, nor were the signals strong, and a good few got away. EA8BC, CR4AF, CR5AF, FM7WF, YS1O, VP5BL, KG4AO, ZD4AE, FO8AG, CP5EK, LX1AS, AR8AB, ZD4AB, 9S4AX, MI3AB (31 via Molise, Asmara), UM8KAA, AP2Z, MP4KW, ZB1CH, ZB1BE and ZB1AJX. On 7 Mc. the following prefixes were heard, again mainly 2000-2100 G.M.T.: ZS3, VQ2, VQ3, VQ4, ZE1, DL, HB9, CR5, OK, I1, VS7, VE1BV at 2030 G.M.M., HP1TI/m.m.; SP, FA9, G, GM, GW, PA, YU, KP6, CN8, 4X4, MP4, VP6, UB5, UA0, UA1, UA4, ON.

Quite a few new VK calls appeared on the band this month, they also apparently finding 14 Mc. too cold. Would like a few scores on countries worked on the lower bands, to see what cooks. Here, have now raised the 7 Mc. score to 42 countries. 5KO, what about your score on 3.5 Mc. OM? My activities on 7 Mc. look like receiving a severe jolt on present indications. I have been receiving interference at odd times from the local Coastal Radio Station, VIT. Measured him as 7000.5 Kc., and the local Radio Inspector tells me that they are allotted the frequency of 7000 Kc. and increased activity is anticipated. You can well imagine what happens to the l.f. end of 7 Mc. when the high powered m.c.w. comes on the air.

3YP has now amassed the fine total of 211 countries, the latest being trapped are EA8, EA9, VT1AC. Some of the VKs apparently have also been working VT1AB on phone. 2ANN snapped up FQ8AE for a new one, whilst 4FJ has been trying to get one more Empire station for his Empire DX C.C. Was heard chasing VQ3CF and VP6CDI on 7 Mc. with negative results. 4RW, when last heard, had reached the 99 goal, and was ready to fall off the fence into the DX C.C. enclosure. Maybe he has fallen ere this. 2AGU has 143 countries chalked up.

The racket of one station doing most of the transmitting and receiving for a third party to "claim" a new country, was heard amongst some of the phone boys this month, even to the extent that they would despatch the third party's QSL. The third party took very little part in the QSO, as the DX station could not read him. It's one way to make DX C.C. anyhow I guess.

Conditions for April should show an improvement on 14 Mc. between 0630-1000 G.M.T., but little else can be expected here of any stability.

● The thought for the month. "If you are going to enter a DX Contest, check up on the rules first." Some VKs, according to their serial numbers, were using a KW in the W/VE Contest, whilst another started the B.E.R.U. Contest at 1700 local time instead of 1700 G.M.T.

DX C.C. LISTING

PHONE

Call	No.	Ctr.	Call	No.	Ctr.
VK3JD	1	155	VK4JP	8	114
VK3EE	10	154	VK3AWW	14	112
VK6RU	2	145	VK4WJ	17	104
VK6KW	4	145	VK2ADT	13	102
VK3BZ	3	141	VK2AHA	15	102
VK4KS	9	135	VK4WF	16	101
VK4HR	12	129	VK3GG	18	100
VK6DD	6	126	VK3IG	5	100
VK3LN	11	125	VK3JE	7	100

CW

Call	No.	Ctr.	Call	No.	Ctr.
VK3BZ	6	183	VK4DA	7	113
VK3FH	15	155	VK7LZ	17	112
VK2EO	2	152	VK5BO	33	111
VK3CN	1	151	VK3JE	21	108
VK4EL	9	150	VK4RC	18	107
VK2QL	5	141	VK2GW	16	107
VK3VW	4	140	VK3YD	27	105
VK3KB	10	138	VK5FH	31	105
VK6SA	28	136	VK3JI	25	104
VK4HR	8	135	VK2YC	34	103
VK6RU	18	129	VK4FJ	29	102
VK4RF	11	125	VK3APA	14	101
VK3EK	3	122	VK3NC	19	101
VK5RX	23	119	VK3CX	26	101
VK4DO	20	117	VK2OA	32	101
VK3UM	12	116	VK7RK	22	100
VK3XK	30	114	VK7LJ	24	100

OPEN

Call	No.	Ctr.	Call	No.	Ctr.
VK3BZ	4	202	VK5FL	26	116
VK6RU	8	176	VK3JA	43	114
VK4HR	7	173	VK2ADT	14	113
VK3HG	3	171	VK4RC	21	110
VK3KX	1	167	VK3ZB	34	110
VK6KW	13	165	VK4WF	40	109
VK2DI	2	160	VK2ZC	25	108
VK3JE	12	154	VK2YL	11	106
VK4EL	10	150	VK3JI	33	105
VK4KS	24	149	VK3AWN	36	105
VK4DO	15	145	VK2VN	18	104
VK3MC	5	139	VK4UL	27	104
VK3OP	19	137	VK2HZ	17	103
VK6DD	22	136	VK7KB	30	103
VK2ADE	28	133	VK2TI	37	103
VK2AHA	9	128	VK3HO	38	103
VK3LN	29	128	VK6DX	42	103
VK2AHM	20	125	VK7RK	31	102
VK2NS	16	123	VK4TY	35	102
VK4FJ	32	120	VK2ACX	6	100
VK3HT	41	117	VK2TG	39	100
VK7LZ	23	116			

50 Mc. W.A.S.

Call	Certificate Number	Additional Countries
VK4RY	2	2
VK2VW	9	2
VK6DW	3	1
VK4HR	4	1
VK3PG	5	1
VK3RR	6	1
VK2AEZ	10	1
VK5LC	1	
VK3HT	7	
VK2ABC	8	

CUTTING POLYSTYRENE ROD

When cutting polystyrene rod or tubing into short lengths, as for feeder spreaders, the usual method of hacksawing leaves a rough edge. Further, the sawing must proceed at a snail's pace or the polystyrene will melt, gumming up the saw blade.

Next time try an ordinary tubing cutter, the kind with a circular blade that rolls around the tubing. It will cut either rod or tubing in a fraction of the time required for sawing, and will leave a much neater cut end. If an extra smooth end is desired, the raw cut end may be "fire polished" in the manner of glass tubing by pressing it briefly against the barrel of a hot soldering iron.—"QST," Jan., 1951.

FEDERAL, QSL, and DIVISIONAL NOTES

Federal President: W. R. GRONOW (VK3WG); Federal Secretary: G. M. HULL (VK3ZS); Box 2611W, G.P.O., Melbourne.

NEW SOUTH WALES

President: J. Corbin, VK2YC.
Secretary: David H. Duff (VK2EO), Box 1734 G.P.O., Sydney.
Meeting Night: Fourth Friday of each month at Science House, Corner Gloucester and Essex Sts., Sydney.
Divisional Sub-Editor: A. C. Pearce, VK2AHB, 131A Balmain Rd., Leichhardt, N.S.W.
Zone Correspondents: North Coast and Tablelands: J. M. Retallick, VK2XO, Raleigh; **Newcastle:** H. Whyte, VK2AHA, Vale St., Birmingham Gardens, Newcastle; **Coalfields & Lakes:** H. Hawkins, VK2YL, 27 Comfort Ave., Cessnock; **Western:** W. H. Stitt, VK2WH, Cumbijowa, Forbes; **South Coast and Southern:** R. H. Rayner, VK2DO, 42 Pettit St., Yass; **Western Suburbs:** A. C. Pearce, VK2AHB, 131A Balmain Rd., Leichhardt; **Eastern Suburbs:** D. B. Knock, VK2NO, 43 Yanko Ave., Waverley; **North Sydney:** L. D. Cuffe, VK2AM 779 Military Rd., Mosman; **St. George:** J. A. Ackerman, VK2ALG, 32 Park Rd., Carlton; **South Sydney:** V. H. Wilson, VK2VW, Cr. Wilson St. and Marine Pde., Maroubra.

VICTORIA

President: G. S. C. Semmens, VK3GS.
Secretary: C. Dyer (VK3DY), 19 Collington Ave., Brighton (XA 6326).
Administrative Secretary: Mrs. S. May, Law Court Chambers, 191 Queen St., Melbourne.
Meeting Night: First Wednesday of each month at the Radio School, Melb. Technical College.
Zone Correspondents: Western: C. C. Waring, VK3YW, 12 Skene St., Stawell; **South Western:** K. O'Rorke, VK3AKR, Killigrew, Westmere; **North Eastern:** T. K. Tennant, c/o. Victory Theatre, Tatura; **Far North West.:** M. Folie, VK3GZ, 101 Lemon Ave., Mildura; **Eastern:** H. O. Kellas, VK3AHK, Tinambra; **North Western:** C. Case, VK3ACE, Cummign Ave., Birchip.

WI BROADCASTS

All Amateurs are urged to keep these frequencies clear during, and for a period of 15 minutes after, the official Broadcasts.

VK2WI: Sundays, 1100 hours EST, 7196 Kc. and 2000 hours EST 50 and 144 Mc. No frequency checks available from VK2WI. Intra-State working frequency, 7175 Kc.

VK3WI: Sundays, 1130 hours EST, simultaneously on 3598 and 7196 Kc. and re-broadcast on 50 and 144 Mc. bands. Intra-State working frequency 7185 Kc. Individual frequency checks of Amateur Stations given when VK3WI is on the air.

VK4WI: Sundays, 0900 hours EST, simultaneously on 3750 Kc., 7196 Kc., 14342 Kc., 52.4 Mc. and 144.138 Mc. Frequency checks are given two nights weekly, and the times are announced during Sunday broadcasts. 7065 Kc. channel is used from 1000 to 1030 hours each Sunday as VK4 query service to VK4WI.

VK5WI: Sundays, 1000 hours SAST, on 7196 Kc. Frequency checks are given by VK5DW by arrangements only on the 7 and 14 Mc. bands.

VK6WI: Sundays, 0930 hours WAST, on 7196 Kc. No frequency checks available.

VK7WI: Sundays, at 1000 hours EST, on 7196 Kc. No frequency checks are available.

QUEENSLAND

President: J. H. Farrell, VK4WJ.
Secretary: J. F. Pickles, VK4FP, Box 638J, G.P.O., Brisbane.
Meeting Night: Third Friday in each month at the I.R.E. Rooms, Wickham St., Valley.
Divisional Sub-Editor: Clive J. Cooke, VK4CC, Kuran Street, Chermside, Brisbane.

SOUTH AUSTRALIA

President: E. A. Barbier, VK5MD.
Secretary: G. M. Bowen, VK5XU, Box 1234K, G.P.O., Adelaide.
Meeting Night: Second Tuesday of each month at 17 Waymouth St., Adelaide.
Divisional Sub-Editor: W. W. Parsons, VK5PS, 10 Victoria Avenue, Rose Park.

WESTERN AUSTRALIA

President: R. W. S. Hugo, VK6KW.
Secretary: W. E. Coxon, VK6AG, 7 Howard St., Perth.
Meeting Place: Padbury House, Cr. St. George's Ter. and King St., Perth.
Meeting Night: Third Tuesday of each month.
Divisional Sub-Editor: Alec A. Smith, VK6AS, 75 Weston St., Carlisle, Western Australia.

TASMANIA

President: J. Brown, VK7BJ.
Secretary: R. D. O'May, VK7OM, Box 371B G.P.O., Hobart.
Meeting Night: First Wednesday of each month at the Photographic Society's Rooms, 163 Liverpool St., Hobart.
Divisional Sub-Editor: S. Excell, VK7SJ, 77 Molle St., Hobart, Tasmania.
North Zone Correspondent: R. H. Kilby, VK7RK, 5 Galvin St., Launceston.

FEDERAL

1950 VK-ZL DX CONTEST

Due to the laudible desire on the part of the N.Z.A.R.T. Contest Manager, Jock White, ZL2GX, to have the 1950 results of the VK-ZL International DX Contest out on time, Jock was unable to find time to write comments on the Contest to publish with the results. However, he has now forwarded his comments with an apology for their lateness, together with a few late entries. He reports as follows:—

"Possibly there are a few who are awaiting some comment from me about the Contest—I wonder? After perusing the results I am sure all will realise that the number of logs received this year less than for the other two post-war contests." (The two contests refers to those conducted by the N.Z.A.R.T.—Fed. Sec.) "This I know can be put down to the almost impossible conditions prevailing on most bands. In view of this, the scores of the winning competitors are all the more creditable and reflect nighly the operating abiilty, tenacity of purpose of the operators as well as the efficiency of their equipment. Many of the overseas logs had postscripts apologising for the poor score and explaining that VK-ZL signals were simply not audible and very conspicuous by their absence.

"With so few logs from overseas, the matter of checking becomes difficult and one has to rely to a great extent on the integrity of the competitor. I had no reason to doubt any entry—in fact the contrary was the case because several competitors had duplicate QSOs and these were suitably marked and no points claimed. I would, however, make a plea for neater logs. Cross checking is a difficult and laborious task which can be made much easier if care is taken in writing up the log." (If the Federal Convention adopts F.E's. proposal for a standard log sheet for contest use it is hoped this difficulty, known only too well to F.E. too, will be overcome.—Fed. Sec.) "Many were beautifully done. Perhaps it is unfair to mention individuals, but the logs of VKs 2DG, 6RU and 6KW come to mind as being perfect. Thanks chaps! I would also suggest a uniform size of log paper, the ideal being quarto.

"Contacts made with two overseas stations were deleted from logs. These stations were YA2B and 9AA as there was grave doubts as to their legitimacy.

"This year the top score went to VK with the top ZL scores several places 'down'. It looks as if, in spite of previous protests to the contrary, that VK has the better DX conditions. In several cases scores were very close, e.g., VK6RU and VK3HW; ZL1MB and ZL1BY, but the most careful log checks did not upset the placings.

"All certificates were posted before the end of January. This was rather a herculean task and I trust that no omissions, etc., were made even with the cross checking of certificates and address labels! But if so I would be pleased to make any rectifications.

"In conclusion I would add that, by their comments, the overseas gang are awaiting with anticipation the 1951 Contest so here's hoping that conditions will be a little more kind."

—Jock White, ZL2GX, Contest Manager.

Late Entries

The following late entries were received.
C.W.: OH2TM 209 pts., DL1XF 642 pts., PY2NX 220 pts., LA5Q, 45 pts., OK1BM 205 pts.
Phone: PY2NX 149 points.
Listeners: OE335 935 pts., OE323 876 pts., OE196 822 pts., OE224 280 pts., OE369 243 pts., OE150 130 pts., HA272RS 385 pts.

ALTERATIONS TO DANISH REGULATIONS

A letter of interest to readers of "Amateur Radio" has been received from OZ2R, Chairman of the Experimenting Danish Radio Amateurs, indicating minor, though important, changes to the regulations under which the Danish Amateurs are working as from 1st January, 1951.

It is pointed out that some of the new frequency bands are only of a temporary nature put at the disposal of the Danish Amateurs until the Atlantic City plan of 1947 comes into force, but the band limits are to the greatest extent possible in agreement with those agreed upon for Region 1 at the Paris Amateur Congress held in May, 1950.

The Danish frequency bands are:—

"Small" Licence (8 w.p.m.): Telegraphy—3500-3600 Kc., 3800-3940 Kc., 144.0-146.0 Mc. Telephony—3600-3630 Kc., 3690-3800 Kc., 3800-3940 Kc., 144.0-146.0 Mc.

"Ordinary" Licence (12 w.p.m.): Telegraphy—3500-3600 Kc., 3800-3940 Kc. (temporary), 7000-7100 Kc.; 7100-7200 Kc. (temporary), 14000-14350 Kc., 14350-14400 Kc. (temporary), 28000-29700 Kc., 144.0-146.0 Mc.; Telephony—3600-3630 Kc., 3690-3800 Kc., 3800-3940 Kc. (temporary), 7050-7100 Kc., 7100-7195 Kc. (temporary), 14125-14350 Kc., 14350-14395 Kc. (temporary), 28200-29695 Kc., 144.0-146.0 Mc.

Input Limits: 50 watts for telephony and modulated telegraphy. 100 watts for unmodulated telegraphy.

Portable Transmitters: Within Danish territory only on 144-146 Mc. On other bands only on special permit.

Frequency Modulation: Permitted on 144-146 Mc., maximum frequency deviation plus or minus 30 Kc. All telephony bands are open to narrow-band frequency modulation with maximum frequency deviation plus or minus 4 Kc.

Third Party Traffic: Not permitted.

Licence Examinations: Morse code 8 w.p.m. or 12 w.p.m. Technical verbal examination on decent knowledge of electro, radio and traffic technique especially applying to radia amateurism.

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FEDERAL QSL BUREAU

RAY JONES, VK3RJ, MANAGER

According to VK1RF the ionospheric recorder at Macquarie Island causes intense QRM. The recorder which makes a sweep every ten minutes blots out everything on the HRO for two minutes. The Tx used by VK1RF uses 75 watts. Personnel at Macquarie Island expect to be relieved during April.

Cards returned from the R.E.F. indicate that FL8AC and FL8AM allegedly in French Somaliland are both phoneys as is FI8BK.

The manager of the R.C.A. QSL Bureau, Box 126 San Remo (Ilwoh), forwards some attractive printed matter on the delights of that locality. The brochure lists events ranging from pigeon shooting through to philatelic exhibitions scheduled to take place from December, 1950, to April, 1951. Visitors with the coin to concentrate on the Riviera certainly will enjoy a comprehensive range of events.

Felix Franchette, FK8AC, expects to visit Australia from 2nd April to 20th April, spending the first half of this period in Sydney and the last half in Melbourne. Anyone interested in meeting Felix should contact this Bureau for a suitable time and date.

Nothing further has been heard from Jack Elliott, Z13CC, regarding his proposed visit to Australia. This was originally scheduled to take place during April, 1951.

Writer's ego was rudely shattered during the recent B.E.R.U. Contest, as had oft made claim to ability to make sense out of any sort of morse. During said contest writer heard station signing KD3BZL calling CQ B.E.R.U. on many occasions but did not answer him as was sus-

picious of his bonafides. Mistrust was allayed, however, by hearing several old and knowledgable G stations working him. Finally called and worked him under said call sign. Later telephoned the cunning fox whose den is at 50 Eighth Street, Parkdale, for the low down on the location of KD. Morrie's reply was immediate and to the point. Said he, "I thought you were an operator. Yet you read YI as KD." Am now thinking of going phone—but not thinking very hard.

Cards from 9S4AX are now coming to hand via the D.A.R.C.

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NEW SOUTH WALES

EASTERN SUBURBS

2AJG has not been heard lately with his familiar c.w. clip at the l.f. end of 20 or 40. The reason, says he, is that he is a bit browned off --is no longer interested in Amateur Radio. Maybe, and maybe not OM. Those germs are virulent—look at the really old hands who've thrown in the towel and then come back for more punishment. Visitors to this correspondent's shack, inclusive of course of the ever-faithful ZL1OF, have been 2ZQ and 2DO. Condolences are offered to 2TI on the loss recently of his father. Still getting around here and there and everywhere—a bit like the elusive Pimpernel—is 2AYE. One never knows where that bloke will bob up next; at what station in what country town. Heard him lately extolling the virtues of Wollongong from 2DY.

Reference is made in Feb., 1951, "A.R.," in the obituary to our late cobber Bill Cottrell, to the effect that he was "OA2ZN" in 1924. The call sign at that period would have been under the "A" prefix. It wasn't until 1927 that Australians used the "OA" prefix, which was finally changed to our present "VK." An interesting point about the "OA" period was that the prefixes were used together with the "called" country's prefix in lieu of the separative "DE" (I'm talking of c.w. of course—phone DX was a rarity then). Thus "6AM NUOA 2JR," meaning that Australian 2JR was calling American 6AM, and vice versa. "2OD EGOA 2CM" indicated that Australian 2CM was calling British 2OD. The idea had much to commend it, and A.R.R.L. tried to get the Washington Conference to adopt the scheme, but it wasn't approved—so we pop in with our "DE" ever since.

2KH has been heard once or twice with good phone at the h.f. end of 20. 2AZH is having fun with amplifiers these days, in between running his own station and chasing a few "bugs" for 2HP; Bruce is pleased with a "Leak" amplifier he built recently, to a "Wireless World" (England) design. The recently built crystal front end receiver at 2NO is getting a fair amount of use (How about an article on same, Don?—Ed.) and is streets ahead of anything yet used at that station. So much so that a spot of c.w. DX has been indulged in, with signal stability a real pleasure. Once again—a final request, plus ultimatum. The writer of these lines is a busy man in directions other than Amateur Radio. Response to appeal for notes of personal doings in the area has, with one exception, brought zero result. Don't say that you haven't been warned.

Sorry to see that announcement in February "A.R." about the sudden passing of Hermann Asmus, VK3ET. Once again, Australian Amateur Radio suffers the loss of a fine type—a telegraphist without a peer—and a most likeable gentleman. He had visited the writer's station on a few occasions. Like the late VK2ZN, Hermann was a highly experienced photographer.

HUNTER BRANCH

As usual the last meeting of the Hunter Branch was very well attended. The major part of the night was taken up by a very interesting talk on the v.h.f's. given by 2BZ and 2ADT. 2CS has a BC348, busily engaged "hotting" it up. Secretary 2SF hasn't been too active of late. Ham Radio was the subject of a lecture presented by 2XQ at a Mayfield Rotary meeting during February. 2MC having fun on 2 but finds the 3 over 3 a bit of a mystery. 2UY installing mobile gear in the course of his daily toil, has 2NX working with him these days; Shorty should have his 1st class commercial ticket by the time these notes appear. 2AHA and 2XY putting the final touches on the code. 2FP fed up with the rotten conditions on 28 and losing interest. 2AFS still away. 2VJ last heard of from Kempsey, working up there and operating from 2AHA's. shack. 2PQ only heard on 40 with that hefty signal. 2ZC still not settled down after his great holiday. 2AAI also at Waratah has been getting out nicely on 20 phone despite poor conditions. 2AWD makes the meetings more frequently nowadays and is much more active on 40. 2BZ not as keen as he used to be, but is on 6 and 2 at times. 2XT has nice pipe beam underway. 2XY been busy getting gear squared up for Urunga. 2AGD nearly finished his complete station, the v.f.o. was the last item. 2CN given low frequencies away for 144, had some trouble with 144 rig but OK now. 2ANA has made a comeback on 20 with a new F/D using open wire line. 2AXM has little rig perking well and having fun on 40. 2CW is a 144 man now. Harry McPhee, at Mayfield, is battling very hard on one xtal frequency, gets out well but finds it hard to make contacts; a v.f.o. is underway. 2AGY busy with the new home.

Over Stockton way 2ASJ is the most active. Recently Ron was able to help a VK3 arrange for urgently required oxygen to be sent to a country hospital 2IS very active on 40 with QRP. 2PJ also active on 40 phone. 2ADS gradually getting organised at Birmingham Gardens and has a big h.t. tranny now, won't be long before he blows holes in the ether. 2OS been having lots of feed-back troubles, but things under control now. 2TE had a great holiday in VK3 recently and gets his share of DX on 20. Believe 2SA will be leaving Newcastle soon, which is bad news. 2DZ is still glued to 20 phone.

Up Maitland way 2XQ has his high-power modulator going on 20 and 10. 2DG is very pleased with his new receiver; the Branch would like to have all the dope on it in the form of a lecture. 2AKP snowed under with work and not on the air much. 2TY been sick of late—lost his voice. 2ANU has a lighting plant installed and will be on higher power. 2ANL must be QRL. 2AHA been busy lately getting the portable fixed up for Urunga, will spend his holidays up there so next month's notes will be written by ASJ (I hope). At New Lambton 2ZT works plenty on 40 phone; 2KG has minor power supply almost complete plus v.f.o. and Rx.

COALFIELDS AND LAKES

Must apologise for missing out on the notes last month. Had written them but found they were still in Cessnock when they should have been in Melbourne! 2VU has not been quite so active due to turning carpenter, building cupboards; has been heard back on 6 this week and had a couple of weeks' holiday recently. No news of 2JZ, 2TY or 2YO. 2KF has been heard on 28 Mc. talking of building more gear. Bob believes in giving things a go and will try everything on hand before reverting to new equipment. No news of 2KZ for quite a while, but believe he has been busy with the paint brush on the house. 2ALR has been on a few times and intends putting up a new antenna for 7 and 14 Mc.

2PZ has a receiver with a string of r.f. stages, a few features in tuning and bandspread too, it shows promise. 2ADT can be found on 2, 6, 20 and 40; even worked an EA on 14 phone, a YL too. 6 metres has gone back into its shell, though conditions between the Coalfields and Sydney have been very good on some nights. Jack made trip to Sydney for the Convention to display the turret switched receiver —now they want him to take it to Urunga at Easter. Just as well it's nice and solid. If you work Jack ask him about a really good two band antenna, results were really interesting.

Am afraid I haven't much news from the Lakes area, in fact 2RU and 2KR are the only stations heard. Others must be active, so how about some news? 2YL having mike trouble, the old faithful D104 has "had it." Not on much but will rejuvenate the antenna set up soon.

WESTERN ZONE

Learn with regret that 2LY is leaving Katoomba to become a VK3; had a pleasant farewell contact from 2HZ's shack. Dubbo's newest Ham is Bob, 2AXS, running 60 watts with a Command v.f.o., and has nice signal on 7 Mc. 2AMV getting portable gear ready for Urunga.

2BT on the air again from his new location at Eugowra; antenna problem was solved by reaching out the window and clipping on to the neighbour's b.c.l. skywire. 2JW and 2ALX, of Orange, are planning another mountaineering trip to top of 4,000 ft. Mt. Canobalas; Norm and Don will have 50 and 144 Mc. gear, so v.h.f. men take note. 2EI is apparently the only Parkes Ham active; heard occasionally on 7 Mc. phone. 2NS heard more often on 14 Mc. than 7 Mc. and still picking up a rare one; Ham Radio has been pushed somewhat into the background by the new lathe.

2ACU has been suffering badly with "black-out" trouble during the month. Latest version of "taking coal to Newcastle" is Rod buying ice. Do you think we should take some "Ham" to Urunga, Rod? 2WH has been struggling to get going on 144 Mc. between fishing trips. What with supers that won't regen and fish that do not know the Game Fish Association rules, it hasn't been a successful month. 2ACP is busy teaching a budding Ham in Katoomba the code. 2EX still thinking of re-building but no action yet. 2HZ not very active, has done a little building but not much to be seen yet. Things on the Mountains are rather quiet; 2SS, Lawson, been active on 14 Mc.

SOUTH COAST AND SOUTHERN

Although conditions have been very poor this month, something new occurred to add a little more interest to this hobby of ours. 2AKY reports that he made contact between his QTH (Holbrook) and Adelaide on 122.9 Mc. This, I believe, would be a record for two-way reception of signals between ground stations in VK land. Distance covered was 600 miles and signals were S6/7 and perfectly readable.

Conditions on 40 at night are a dead loss and the only signal of any strength is the Asiatic on 7137 Kc. 2AKY has broken the ice as regards DX, he has QSOed W2ZGF on forty to open his account. What with 600 miles on 122.9 Mc. and W on forty, Toby is going places.

2ALS has taken unto himself a Bendix TA12D; a spot of conversion before she goes on the air. 2TC heard on 80 CQing but did not hear any replies. 2ON on c.w. and phone, has nice fist on key and his n.b.f.m. sounds f.b. We hope to have a new station and also another member for the W.I.A. within the next fortnight. No news from my listening post at Coota, this month, guess Rex is QRL with film squirting job. 2APP active but struck snag in hum trouble; believe modulator to be run from accumulator for filaments. 2AID was contacted for a few minutes by 2AKW, but conditions were bad and signals not very stable. Two new stations listed as being in this zone, 2AKZ at Nowra and 2AQF at Denniliquin; no news as to their activity. The Nymph of Nyngan has at long last to suffer from QRM from another Ham at Nyngan. 2DO had QSO with 4DO on 20 on 7/3/51, this was one day short of 17 years when these stations first contacted.

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VICTORIA

The March monthly meeting of the Division was held at the usual place, the Melbourne Technical College, Bowen Street, Melbourne, on Wednesday, 7th. The President, 3GS, occupied the chair and there were approximately 150 members present—which was pleasing to see. A visitor, one 7PF, was given a hearty welcome to the meeting by the President and members. The agenda item for the evening was a lecture plus a colour film, presented by our class instructor, Dave Medhurst, of the Melbourne University. Dave came along armed with amplifiers and a 12 inch c.r.o. to show the members just how one's heart works—in other words the apparatus was the Electric Cardograph. Dave introduced the lecture with a colour film showing, and explaining, the action of the human heart. At the conclusion of the film, three human guinea pigs came forward to have their "tickers" give a visual scene on the c.r.o. There was great sighs of relief when Dave gave them the all clear. The lecture was most instructive, and Dave has the happy knack of making the subject very clear to the audience. The President, on behalf of the members, expressed his appreciation of the fine talk and asked the members to carry the appreciation with acclamation.

The business side of the meeting was the promotion of the Editor of the magazine, Tom Hogan, to Life Membership of the Division. This was moved by the President, and seconded by the Chairman of Council, Dick Dowling, and supported by Jack Duncan. More members came forward and gave their names for the roster to work VK3WI. This will now enable the Council to have a steady stream of "announcers" and operators for the station. The meeting closed at 2235 hours.

By the time these notes are read the Federal Convention will have come and gone. A full report will appear in a future issue of the magazine, also our Division's annual meeting will have been held.

We are very sorry to hear that 3BH's wife was taken to hospital. 3ACL, of Red Hill, was an inmate of Mornington Hospital. Our Administrative Secretary, Mrs. May, was away from the office with the "wog" for a few days. That bundle of energy, 3ARL, should be back at work by now, we have certainly heard him on the 40 metre band. 3WQ has been QRL in VK2 with "show business."

NORTH EASTERN ZONE

3HZ, back from holidays, contacted 3AJO who is using a Type A now; must have you on the hook-up Jack, I mean John (YL please note). 3APF building new modulator, heard back on 40 recently. 3GD would like the re-appearance of the "Old Man," George thinks his comments were very constructive and designed to help Amateur Radio; still on batteries and pet beef is v.f.o's. on 20 metres. 3ACK in throes of building radio controlled plane, according to local paper (yes he hit the headlines). 3AT visited 5SD and 5KO whilst in VK5 land, the latter being an R.I., showed Alec over the frequency measuring station. Alec being suitably impressed with all he was shown. Alec is experimenting with s.s.s.c.

3KR visiting someone in Shepp., wasn't yours truly. 3UI has another 2 metre crystal controlled converter. Ron Gibb up Wang. way still looking for wavemeter so that he can obtain

call sign. 3FD still without modulator. 3ACK partly on deck from 3HZ. 3APF in Melbourne. 3ALE also in land of missing along with 3AGT. 3JK heard on hook-up. 3ALE is awaiting modulation tranny. 3YV still eminating goodwill cheer, etc., from Wang.; you have something to winge about Howard. Bert Brown, associate from Yea, gives you boys flattering reports according to letters I have received. Bert slightly unhappy since getting hand caught in bottling machine at work, then being nearly bowled by lightning all in the one week. You boys may receive hand painted SWL Cards one of these days "If" your lucky.

In closing, the zone correspondent's new QTH is care of the Victory Theatre, Tatura.

CENTRAL WESTERN ZONE

One of the disadvantages of country life is the continuous ebb and flow of population. Since our last notes 3TZ has departed from Stawell to Melbourne and 3AKP is departing to Horsham. 3TA has a crystal controlled converter ready for 144, so we hope something will be done about that Melbourne to zone two way contact on 144, and the three miniature tubes handed over to a permanent owner.

During the month our ex-member 3AJO popped in for probably the last time. John is on the air now from Shepparton using a Type A. He is also getting married soon (poor chap). 3DP busy on an s.s.b. Tx on 7 Mc. but is suffering from lack of output. 3ARM after a long absence, on 3.5 Mc. and putting out quite a nice signal; has changed the antenna to an end-fed 80 metre zepp which works out OK on 40 also.

3XU rebuilt Tx with a band-switched exciter and an 813 in the final with 100 watts modulated by a pair of 807s in AB2; Gordon puts out a beautifully modulated signal and is a pleasure to work. 3ARL is now home again, and busily engaged in his favourite sport. Anyway it is nice to see and **hear** him about again after his long absence. 3YW is now looking for contacts on 3.5 Mc. s.s.s.c., present frequency is about 3554 Kc. and the transmitter, which uses a crystal band-pass filter on 1600 Kc. for sideband suppression, runs to 35 watts input on peaks to a single 830B in class B.

As a reminder to all zone members, and other interested parties, the preliminary date for our **next Convention** is Sunday, **23rd September**, and the place **Ararat**. Also don't forget there is a zone hook-up on 7150 Kc. (approx.) at 1000 hours on the second Sunday of the month.

For the first time since our Magazine returned to print an active member of the Magazine Committee has taken unto himself a wife. Pictured above is your Circulation Manager, Ian Sewell (VK3IK), and his charming bride, Lynette. With her assistance we are sure the circulation will be absolutely correct in future.

SOUTH WESTERN ZONE

Your scribe has been fairly inactive this month and apparently there has not been very much activity in the zone generally, not much to my knowledge anyway. 3AGV went Interstate on the 12th and headed for the Blue Mountains in VK2. He took his Type 3 with him. 3AGE still active on 40 and 80 when time permits, though the picture operating keeps him busy at nights and on Saturday afternoons. 3AGD is building himself a new shack. Haven't heard much of 3II this month except on the emergency net. 3ADN very quiet of late, XYL must have put the axe through the rig.

I would like to bring to the notice of all South Western Zone members that there is still a zone hook-up on 80 metres at 2100 the first Sunday of every month. Last hook-up (4/3/51) was a total washout as such; not because static was bad, but because a lot apparently did not try and get on.

3VF is leaving the district and going back to Melbourne. The Geelong gang will be sorry to lose him. 3AIC has built up a two stage rig using 3S4s with the idea of taking it portable. 3IC playing about with an AT5 and has built up a new power supply for it, also has altered his relay system. 3BU shortly putting up poles at shack at Barwon Heads. 3ALG has his TA12D (30 watts) perking and running. 3AJF and 3APG were heard on the band during the month, 3AJF was using a RC16B. 3BW also heard on 40 metres using his Type 3. 3AJT and 3ABE working phone DX on 20 metres. 3AOL having trouble with his Rx and modulator.

GEELONG AMATEUR RADIO CLUB

There was a good attendance of members at the new club rooms, where 3BU provided the syllabus for the evening, films, which included 3BW erecting his rotary beam. At the next meeting 16 members were present, the President again presided over the meeting. The new club rooms are more comfortable than the previous ones. The lecturer on this occasion was 3SY whose subject was "Speech Equipment" as applied to broadcast transmitters, a lecture which proved most interesting to members. Jack certainly knew his subject.

Recently the boys got together and pulled down the doublet antenna in adverse weather conditions and erected it at the new location. For intending members, the location is two doors up the hill from the Post Office in Gheringhap Street in a room at the back of the building.

EASTERN ZONE

The chief item of interest this month is that after a hook-up lasting 3¼ hours, we decided that the next Eastern Zone Convention will be held at Warragul, on the 3rd and 4th of November, 1951. 3AMV is doing the necessary arranging—the poor chap doesn't know what he has let himself in for, hi!

Sale Radio Club's April meeting will be held on Tuesday, 17th April, at Maffra, at the QTH of 3SS. Club President, 3ABF, has invested in some large trannies, etc., for the new rig. 3ABP active on 40 phone between flights. 3AFG not heard lately. 3AJA pounding the brass, also on 40. Wealthy sheep man, 3IO, busy counting the takings—that'll make him bite! 3QZ and 4PR handled some emergency traffic for the "Glory Without Power" boys—S.E.C. to you!—when phone and power lines were out during February storms.

3PR claims he is not receiving sufficient publicity in these notes—some people are never satisfied! 3TH left his tractor out one night and in the morning it had disappeared, except for the top of the exhaust pipe—the result of a cloud burst up the river. 3RH, 3VL, 3US, 3DI and 3TH with occasional assistance from 3QZ, active on 50 Mc. 3HK on the hook-up with f.m. No sign of 3AEP for ages. 3ALA's Rx is on the ice, stay home from the movies and fix it, Teddy!

3SS expects his new assistant to arrive from England about 1st April; Keith's new shop almost completed now. 3WE coasting awhile. 3GO should be on the air again soon—when he moves into new quarters. New Ham here is 3ASE at East Sale drome. 3ZJ announcing at regional 3GI. There are now four Hams there, 3GO, 3LY, 3VG and 3ZJ—must be nearly a record.

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QUEENSLAND

It was with deep and sincere regret that we heard of the decease of student member Ken Collins who, until his untimely passing, had not only been making good progress in the attainment of his transmitting licence, but was also very active as a registered short-wave listener in which capacity Ken received cards from Hams throughout the world. As many of you are aware, Ken's death can be attributed to the extensive war injuries he sustained whilst serving in the Navy during World War

Two. It can thus be said that he gave his life for his and our country as surely had he died on the battlefield.

On Sunday, 25th February, although expected, we were somewhat shocked to hear Frank Nolan announce over 4WI that he would be unable to further carry on as our station manager because of ill-health. After four years at the job, Frank is not to be blamed for wanting a rest anyhow. Thank you, Frank, for a grand effort and we are certainly going to miss your pleasant voice each Sunday. Henceforth if you want words with "Funny Noises" on the air you will have to contact him under his own call.

I doubt if there is one of you who has not heard of G8PO (Lieut. Commdr. Ted Ironmonger) and his famous beam antenna. Well I guess you can now be excused if you call it the G3GZO beam because that is the call sign he now uses. Heard him coming through in fine style about 11 p.m. E.S.T. on what is believed to be his initial contact with VK since his return to England from Australia where he was using the call of VK3WU.

4NC has been smiting with hammer and nail (if he visits you make sure you have the palings left on your fence) and any tick of the clock we should hear him working the DX on a three element beam. It is rumoured Charlie is going to direct it on Bundaberg but of course I think his XYL, Billie, may have something to say in the matter.

4KS (ably assisted by chief cook 4YA and chief announcer 4WD) were going hot and strong in the field day contest. Did I say hot and strong Bill? 4FP (not so ably assisted by 4CC—that's me fellas) was also doing well despite the inclemency of the weather. We have decided to borrow the services of my good friend Wally Blizzard (president of a local archery club) to ensure that in the next contest we have an antenna higher than fifteen feet—they were such high trees too. In addition, Wally may prove useful should any of our competitors decide to use a balloon to support theirs. I warn you he is a crack shot!

It was like listening to the re-union of two long lost brothers to hear 4YA and 3ND contact each other for the first time after Bill's many years of inactivity. Brother, did they ear-bash each other? Nevertheless many of us got just as great a kick out of it as those two gentlemen did. Must tell you that when I was listening to Bill (4YA) one evening my young daughter said, "Gee, Dad, have you got a South American there? He sounds foreign." Guess you know Bill is a Scotsman.

4CI has recently returned from a three weeks' trip to Sydney, during which time he had a portable rig in operation. 4PX has installed an 813 in the final. If you want to know how to cure the parasites—pardon—Arthur should know all the answers by now. 4PD found that his beam required some new timber urgently so decided to use his 40 metre poles. To his amazement, and ours, he finds that the 40 metre antenna works nicely when strung up between the two side fences with the feeders on the ground.

CLARE'S CORNER

How about some of you VK4 boys doing something unusual on the band instead of just switching on, calling CQ, working a station or two, and then pulling the big switch. It would give me something to write about. The way things are at present I've got to do a lot of listening for very little news.

Even 4AH has been very quiet of late, maybe he really did float off during the recent flood rains, and we'll be hearing from him from some remote Pacific island in the near future. 4MD is another one who is rarely heard these days; also 4WG. Still absent from Brisbane is 4UX who is operating from his temporary QTH at Longreach. 4FE has just returned from a brief visit to the south and is now eagerly looking forward to resuming work again, hi!

4NF has not been heard very much of late, maybe he's busy pacing the floor, or could it be 4FJ's new three element beam on 20 metres? 4HD playing a lone hand on 28 Mc., hoping for the band to open up, also notice his absence from the 40 metre hook-up on Sundays. 4RT and 4HR still searching the ether for that elusive DX. 4FJ, who incidentally is doing very well with his new 20 metre three element beam, has the honour of being the first VK4 to claim the certificate of the Far East Amateur Radio League; congratulations Roy. 4PR is well on the way to his second DX C.C. Heard Jim working his 184th country recently.

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SOUTH AUSTRALIA

The monthly general meeting of the VK5 Division was held at the usual meeting rooms to a capacity audience and the lecturer for the evening was 5JD and his subject was "144 Megacycles." Jack made no secret of the fact that as far as he was concerned he was there purely and simply for the purpose of selling this band of frequencies to all and sundry, and as far as I am concerned he succeeded in doing so in a manner far beyond his wildest hopes. The most striking part of the lecture, or should I say the selling campaign, was the practical demonstration at the conclusion of the talk, of the possibilities of this band. Jack staged a first-class contact with 5GF who was operating mobile in the vicinity and later with 5GL who accidentally happened to be listening at the time. It definitely proved just what can be done with low power and the minimum of equipment, and some of the "gasbags" present who inhabit 20 metres at night holding forth with inane chatter could well take Jack's sales talk to heart. Jack had put a lot of work and thought into the preparation of his lecture and the appreciative applause which greeted the vote of thanks proposed by 5KX was a good indication of the success of the lecture. Jack said in reply that he would like to thank the v.h.f. gang who had helped him put it over, and he stressed the fact that if anyone was interested in coming on 144 they could count on the assistance of the boys who inhabit that band.

Quite a lot of discussion took place on the question of a "wet" or "dry" Xmas social, and the matter was deferred to a future date.

I have it on the best of authority that my old friend 5LL has given Ham Radio away. I believe that he has let his licence lapse, and if this be true, then I am very sorry to hear it because 5LL and the early days on 20 are synonymous, and I, in common with many of the old timers, retain many nostalgic memories of those days when a Ham was judged not by the imposing array of gear that he possessed, but simply by the fact that he had enough commonsense to get on the air and become one of the gang. I hope that I have been misinformed Luke.

I am at last one of the residents of the posh suburb of Rose Park and I do not expect to be on the air for some time. Incidentally, this Rose Park suburb is not such a bad place, but they are somewhat peculiar people, would you believe me, they use their forks to eat with and they looked very pained if one stirs one's tea with one's finger. I would be the first one to admit that green peas are extremely difficult to balance on one's knife, but long practice at Henley Beach has made me almost a genius at balancing peas. Such is fate, all my years of concentration gone by the board.

Our Secretary, 5XU, is now back in circulation after his sojourn in hospital, and although he is not yet quite one hundred per cent., providing that he looks after himself, he will be okay. He and 5KX will be off to the Convention shortly, both prepared to do battle for VK5 on any controversial subject that might arise.

5MS is still very busy on the new home but at least he has found time to straighten out the beam and return it to its previous workmanlike look. Stewart only needs one more transformer to complete his new transmitter. 5KU seems to divide his attention equally between gliding and Amateur Radio, though he manages to do quite a bit of c.w. on 20 and 40 metres. 5FD is another one who is back in circulation again but is also very busy with house-building and providing all goes well with this project, John expects to be active again on the air in about two months. 5TW has been informed that he will have the a.c. connected before the end of February, and with this in view Tom has been getting all his power supplies ready.

5KB has had a fairly quiet month and only hears the local two metre signals, however Peter has been seen with a hefty looking transformer and it appears from this that a new power supply is in the offing. 5CH is yet another Mount Gambierite to be house-building, although he finds time to keep his skeds on 2. In his spare time he also is building a c.r.o. and although my spy makes no mention of it, I will bet that Claude is spending a little time at the power station also. 5CJ is heard now and again on 40 and 2 metres, but Colin at the moment of writing is not entirely himself, because the XYL and harmonic are away on holidays and he realises now just how necessary they are to home sweet home. It is a funny thing, but the average man can hardly hide his feelings when the XYL mentions that she would like to go away for a holiday, and 24 hours after she has gone away he is mentally deciding which would be the easiest way out, the river or the railway bridge. Such is life.

5BY has been singing the praises to all and sundry of his new aerial, and if all is to be believed it is worth praising. However, his morale must have been severely dented when it proved so allergic to that VS7 signal the other night, especially when a peanut whistle signal belonging to 5MD managed to sneak the VS7 from under Dougal's nose. My old sparring partner, 5BZ, is on his way to the higher regions, to wit, six metres, and although he is having a little trouble in finding his way about as yet, there is no truth in the rumour that the mysterious explosion that rocked the northern suburbs the other night had any connection with his signals.

More than the required number of nominations for the VK5 Council have been received and therefore a ballot will be necessary. This is all to the good and should provide quite a lot of excitement in the process. I shall be very busy with my election campaign as you read this, judging at baby shows, laying foundation stones (quite a strain to me incidentally), and of course kissing the winning babies, but anyway may the best men win and all that jolly stuff.

5TL, our genial Treasurer, is at the moment holidaying in VK4, just where I am not in a position to say, but I can assure you that he did not travel up there on "rattling salvation," as his motor bike is known. The gang in VK4 would get quite a shock if Tom rode up in his usual riding costume, because they would be pardoned if they thought that he was passing through to Heard Island. He is a cold little body is our Tom!

The VK5 station that came on 20 the other night saying "Yoo hoo, yoo hoo, calling CQ, anybody will do," might remember that such antics can be pardoned in a youth, fresh on the air, but coming from an older person with years of experience, it cannot be pardoned and can only be classed as the first signs of senile decay. Get it?

In view of the somewhat damaging publicity to Ham Radio that has been given in the local press this last month, there have been quite a few members who have expressed the opinion that some official reply should have been written by the Council of the VK5 Division to the paper concerned. I must admit that at first I felt the same way, but the President's reply to such a question submitted to him by 5LG at the general meeting, soon convinced me that it was the right angle to take. "Doc" said that the best way to treat such publicity was to ignore it and thus it would die a natural death, but if a newspaper controversy was entered into, it only served to keep it alive and possibly draw the attention of a lot of people that did not see the original reference. You know, as much as I dislike this Barbier, I must admit that he seems to have all the answers at the right time.

Once again it is time for the yearly subscription to be forgotten, and once again it is time for the magazine to cease being delivered to those who forget. It grieves me to say that once again it is time for those who forget, to ring up the Treasurer and put on a moan that they have not received their magazine, and in logical sequence it is time for the Treasurer to remind them that the magazine ceases to arrive when the subscription lapses. I could go on with this sort of rot indefinitely, so what about renewing your subscription OM.

Activity in the Berri area this month has been more concerned with fruit preserving than with Ham Radio as the fruit season is in full swing. 5BC has begun crystal grinding in real earnest for his new 6 metre converter and has been very successful to date. The lower frequencies have been neglected while this project has been in progress, so much so that mice-nests and cobwebs are appearing in the low frequency transmitter. Tut, tut, Otto!

5MA has taken delivery of a new power transformer, the likes of which has never been seen outside of the most powerful broadcasting station in the State (5RM, of course). Now how did that one get in my notes, and the worst part of a statement like that, is the fact that I can't deny it. Anyway to get back to Fred's transformer, he has almost to build a special shack to house it and it would appear that a few more ergs are about to emanate from Fred's QTH. He has just finished a new 6 metre transmitter which appears to be the goods, but one thing is worrying him, and that is that a lamp in the absorption loop still burns even with the drive off! My, my.

5KW seems to do nothing but pack and unpack his worldly goods from house to house. Harry is moving into a brand new house which is only about two hundred yards from 5MA, so the fun will be on now. Couldn't you have blown it up Fred, before he arrived. 5SL has re-built his transmitter for the fourth and last time (he hopes) and it would appear that his flock of parasitics is at last on the wing. Incidentally, I take a very suspicious view of his closing remarks in his letter containing these notes, to wit, that he hears that I may be coming up that way doing a spot of relief duty and that I can expect a very interesting time. Thank you very much, but may I coyly ask, just how interesting?

The boys up at Berri had a visit from 2ABC at their last meeting night and he was made very welcome. Fred passed along a few ideas on antenna arrays that the VK2 boys are using and set the local boys' minds working on a new antenna. Another visitor to the shack of 5BC was 2OT from Broken Hill and they arranged

some schedules for 6 metres, but as yet there is nothing doing both ways. 5BC can be heard in Broken Hill, but 2OT has yet to break through.

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WESTERN AUSTRALIA

The February meeting was held in the Institute rooms, Padbury House, on the 20th. The attendance was average, but could have been a lot better. The weather no doubt kept many away, it being very hot and oppressive after a particularly humid day. However, we were all pleased to see three visitors present, namely, 6MU (Merredin), 6DW (Bruce Rock), and 3HG from the Western District of Victoria. The latter had only arrived in VK6 the previous day by Interstate boat, and planned to stay three or four weeks. By the time these notes are printed, 3HG will be back home, but we all trust you thoroughly enjoyed your holiday OM, and hope to hear from you on the air.

6DW has also been on holidays; giving six metres a rest. I believe Don did extra well in the Ross A. Hull V.H.F. Contest, and it wouldn't surprise me at all if one of the prizes comes to VK6 again this year.

The meeting was the closing time for nominations for the 1951 Council, but according to the Secretary only nine were received, a very poor return indeed from 143 papers distributed. It is to be hoped that the ballot papers receive more attention from members.

Commercial interference in Amateur bands came up for a good deal of discussion once again, 7 megacycles of course being the main bone of contention. I can quite understand 6LU's feelings on this subject but much as I hate to admit it, I'm afraid ours is a voice in the wilderness, with as much chance of being heard as a 25 watt amateur signal underneath some of those high power b.c. stations on 7 Mc.

6MU had, unfortunately, overlooked the closing date for his agenda items, but had some up to the minute comments to make regarding certain problems coming before the Division lately. 6JW was also able to assist in this respect, and it shouldn't be long before members know one way or the other where they stand regarding certain conditions under which they operate.

6AG gave his postponed lecture on "Use of C.R.O. in Design of A.F. Amplifiers." Unfortunately the subject of the lecture had to be changed at the last moment, because the amplifier under construction was not available. I think Wally left it home at Darlington. However a good radio man is always resourceful and from out of nowhere Wally produced a vibrator power pack and sundry vibrators, good, bad, and indifferent. These were all tested using the c.r. tube, the results of each test being quite noticeable. From there the lecture became a general discussion of different c.r. tubes, their merits and de-merits, etc. Various members joined in the discussion and it became quite interesting. I'm sure no one missed that audio amplifier of yours Wally.

After the usual ragchew the meeting closed about 10.40 p.m. The next meeting (March) is the Annual General Meeting and 'ere these notes appear in print the new Council will be in office, all set with their new brooms and ready to sweep clean. To the incoming Council, whoever they may be, here's the very best of wishes for 1951-52, and a most successful year in office.

PERSONALITIES

I am indebted to 6WZ, of Geraldton, for the following items of news concerning the gang up there; thanks Harry. From Geraldton comes a thin trickle of news to the effect that Ham Radio there is almost at a standstill. 6EL is engaged in building a "ute" body for his new Morris and never goes on the air. 6CN who is still waiting for a.c., is now almost around to the point of doing something desperate (a couple of 1T4s in p.p. with 45 volts h.t.!) just to find out what this Ham Radio is all about once again; is about 18 months since Cyril last sent out a signal. 6BJ amazed everyone (including himself) by coming on the 7 Mc. band a Sunday or two ago—only stayed for one QSO —then had to chop some wood; very shortly he is about to descend into the same street as 6WZ. The latter station is the only one in Geraldton making any sort of noise at all—and that's an average of about one QSO per week on the 7 Mc. band. Harry has just given away three stages of 1900 Kc. i.f. for a "double convergin" effort. He says everything seems to be "convergin" at the centre of the 7 Mc. band—joeys, shrieks, snorts and Asiatic b.c. stations. 6RT who more or less belongs to the "Geraldton Zone"—there being no "Cue Zone" —is included herewith as having spent his annual holidays at the northern port and having spent some time on visits to the 6WZ shack. Len is just as puzzled as Harry over the performance of the latter's receiver. 6RT has gone back to Cue with four UBL1s determined to lick those d.c. mains or else!

It is rumoured that 6RU did exceptionally well in the last VK-ZL Contest. Two comparative strangers turned up to the February meeting. 6IG whom we had not seen for at least a year, and 6GB who put in an appearance after a lengthy absence; how's the new six metre final progressing Jack? 6AP, whose job keeps him up till midnight, chases the DX in the small hours of the morning when nearly all other VKs are abed. I don't think there is a ZS who doesn't know Alf. 6HC and 6WT left on schedule for VK3 and VK2. They were heard from Norseman putting a very solid signal into Perth.

6GA has been worked from Forrest. I understand Bill will be seeing plenty of Forrest and vice-versa. What was to be a short relieving term had turned into a three year affair. Is that right Bill? Better get plenty of Ham gear up there OM and let's hear more from you.

If other VK6s are spending as much time on the air as what I am, then activity must be at an all time low. One QSO per fortnight is my average these days. Haven't we reached the bottom of that sunspot cycle yet?

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TASMANIA

There is very little of interest to report this month, band conditions have not been the best and apart from a few of the locals, conducting cross town QSOs, inactivity was prominent during the month of February. An apology must be made for the non-appearance of notes covering our annual institute dinner held at Hobart on 2nd March, full details will be included in the next issue.

From 7KX it is learnt the new transmitter is due for its first air test and from what can be gathered will be capable of between 80-100 watts. Parallel 807s are the final amplifiers. Don, during the last few weeks, has enjoyed the thrills and spills of speed boat racing, but has returned to radio, even with the new sales tax. Don is of the opinion radio is the cheapest hobby after all. Believe a beam is eminent at 7RX, the type planned is the two element type and, knowing Keith as we do, should perform well. Friendly rivalry between 7RM and 7RX regarding signal reports on 20 metres favoured Rupe in a recent check with a VK5, much to the delight of 7RM. Heard since his recent modulation trouble is 7LD and from his transmissions of late appears to have completely overcome the trouble.

Disappointed to hear prior to our general meeting that no members would be likely from the Launceston Zone. North Western Zone will be well represented by 7AB, 7KB, etc. Met our old friend 7EJ recently, still busy pursuing his source of income and as most know is resident at Opossum Bay. Ted up until now has not been active from the new QTH; plans are in hand for future improvement to the new rig, so in future more will be heard from this area. Heard 7CT in contact with 7WI one recent Sunday with reasonable strength, but was having local QRM troubles which made reception difficult; glad to hear you again Terry. Another country member seen in Hobart (collecting your wool cheque John?) was 7AG, seen visiting a radio store and appeared interested in a "750" Eddystone receiver. Trust we will see you at the dinner John.

News is to hand of the illness of 3ARL whom needs little introduction to VK7 Hams. Prior to his departure to the mainland the call was 7OL and was a very active member of this Division. Sorry to hear of your bad luck Lin and it is the hope of all that a speedy recovery will be made. From the north the most solid signal heard this month has been from 7MC, sounded f.b. except for a traceof hum on the transmission. 7JD now purchased a new microphone with good results and is active on 40 metres. Trouble in gaining sufficient grid drive to his 144 Mc. Tx is being experienced by 7MY, which has stopped temporarily the automatic transmissions being conducted during the recent few weeks. Seen in town since his return, looking fit, is 7SK. Believe his new hobby is photography and during his recent holiday managed to take some interesting shots especially of his host 2DX.

B.c.l. worries now being experienced by 7SD although with the aid of 7DH appears to have the matter well in hand. Bad luck Don, was surprised to hear 7CF in contact with 7WI and signals heard were S9. Must be the new location Charlie, trust we hear more from you in the future. 7GB heard also on 40 working DX on c.w. Ted is unfortunate in he does not enjoy the pleasure of attendance at our W.I.A. meetings owing to his nature of his employment. Visiting the mainland in the recent month is 7GA now comfortably installed in the new Sandy Bay home. 7RY engaged in the joys of home building, but still manages to enjoy a QSO during the week-ends.

NORTHERN ZONE

As each month goes by I continue to be amazed at our good fortune in being able to contact so many willing persons who are ready to provide entertainment and instruction for us at our meetings. We have had over the last year or so a great number of able lecturers on subjects as far apart as meteorology and recordings and embracing many aspects of radio, each evening providing its own specialised education and the whole adding up to something that would be a credit to an organisation much larger than our zone. Most of our members realise this, but to those of you who may not I would suggest you just stop and think of what we have had and hope to get, try to visualise some of the work and preparation that has gone into those lectures and then appreciate the fact that this W.I.A. of ours is something really worth working for.

Our February meeting provided a somewhat unusual evening and one that must surely be recorded among the top liners. A film evening was arranged and after a good deal of last-minute headaches a most enjoyable selection of films obtained. Our most hearty thanks are due to Mr. Carl Crawford for so very willingly providing the projector and associated equipment and for giving up his time to show the films.

Movement once more seems to be in the air here and it seems as though every time someone gets itchy feet we lose a full member. This time its 7PF and Peter, after having joined D.C.A., has been transferred to VK3. Bad luck for the zone but we hope good luck for you Peter and the best wishes of all go with you. Now you'll be able to be the first to be on both ends of a VK3-VK7 144 Mc. QSO. 7DS is now also with the D.C.A. so now we really can feel safe when we travel the skyways.

Got a new country out of the mail box recently which made 90 per cent. on 140 countries worked, so that rather gives the lie to the idea that QSLing is outmoded. 7LZ happy with his 144 Mc. rig, will be using 7PF's "Lenfo" during Peter's absence. 7BQ also reasonably satisfied with his various v.h.f. rigs and judging from the rapidity with which he disposed of torch globes on 288 the other night I would say be should be. Seems as though the weather has been just right for that bug lately as even I have started a rig for 288 Mc.

A big blow recently accounted for at least two beams in the area, a 6 metre at 7BQ and a 144 Mc. once more at 7AM. As for the rest of the crowd, unless I turn Dorothy Dix I cannot write of their doings so it's time to remind you that the meeting in April is scheduled for Friday 13th and, as last year, a liberal supply of rabbits' feet will be obtainable at small cost.

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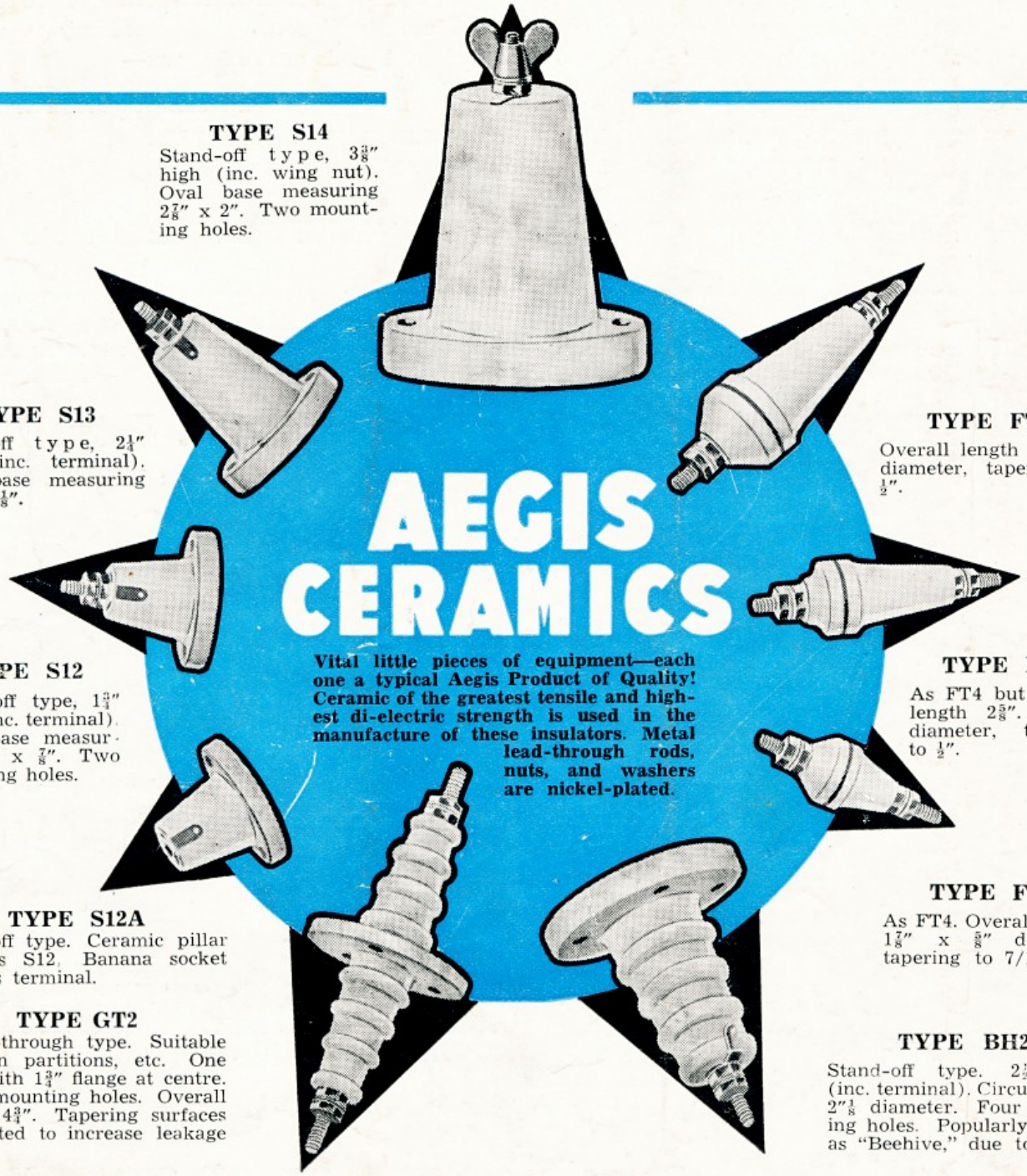

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